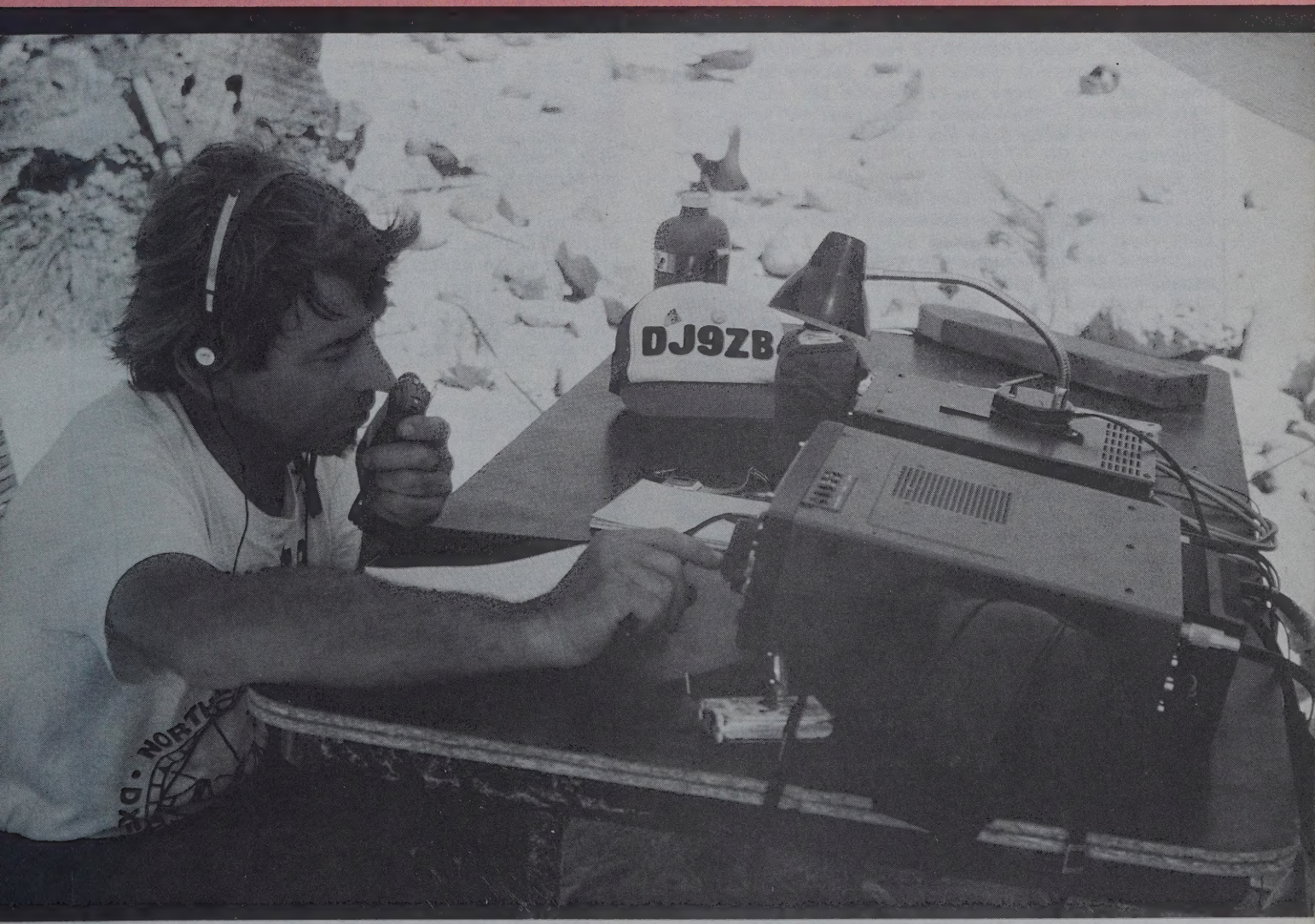
INTN'L MONTHLY MAGAZINE-BY AND FOR ACTIVE RADIOAMATEURS

RADIOSPORTING

FEBRUARY 1986 No. 15 8601 $2.00

ANNOUNCING NEW IRSA WORLD RADIO CHAMPIONSHIP CONTEST
DX NEWS 160 M BULLETIN DXPEDITIONING QSL INFO
LACCADIVE ISLANDS THE THRILL OF 160 RADIO FUNNIES
LOW FREQUENCY GROUND WAVE ANTENNAS THE LOWFERS 160 M ANTENNA
FCC NEWS YL AWARDS CONTEST RULES & RESULTS PROPAGATION



FRANZ LANGNER, DJ9ZB - OPERATING FO0XX
CLIPPERTON ISLAND DX PEDITION

Announcing:

First IRSA World Radio Championship Contest

Phone: Saturday October 4, 1986, 0000 to 2400 GMT
CW: Sunday October 5, 1986, 0000 to 2400 GMT
(First full weekend in October)

The single operator stations may operate no more than 22 hours out of the 24 hours on each mode. A minimum of two hours of rest time may be taken in one or two rest periods.

The multi operator stations can operate the full 24 hour periods.

1. Objectives: For amateurs around the world to contact other amateurs in as many countries as possible. All contacts with fixed or mobile licensed amateur radio stations around the world count.

2. Bands: 1.8, 3.5, 7, 14, 21, 28 MHz

3. Number exchange: Signal report plus the consecutive QSO number starting with 001. (59001 on phone, 599001 on CW)

4. Points: Each correctly sent exchange is worth one point, each correctly received exchange is worth one point on phone and two points on CW, a total of two (three on CW) points for each error free contact. The same station can be contacted only once on each band and mode for a valid point credit.

5. Multipliers: A multiplier, one for each different DXCC country contacted, plus one for each call area in the following countries: USA (W/K/N etc. 0 - 9), Japan (JA1 - 0), Australia (VK1 - 8), Canada (VE1 - 8, VO1, VO2, VY1), RSFR-USSR (UA1, 3, 4, 6, 9, 0) on each band. (Do not count VK1 as a VK - country, too.) Also, a multiplier of one for each of the land, maritime and aeronautical mobile stations (/M, /MM, /AM).

6. Scoring: The final score is the result of the total QSO points from all bands multiplied by the total multipliers from all bands.

7. Categories of competition:

Phone and CW are considered as two separate contests, however, the Combined Phone and CW scores will also be listed and awards issued.

H. High Power - stations using the maximum legal limit up to 1000 Watts output (2000 W PEP)

L. Low Power - stations using the maximum output power of 100 Watts (200 W PEP)

Q. QRP - stations using the maximum output of 5 Watts (10 W PEP)

In each of the above power groups there are the following categories:

A. Single Operator - All Band
B. Single Operator - Single Band
C. Multi Operator - Single Transmitter
D. Multi Operator - Multi Transmitter
E. Club Competition - Combined Phone and CW

Category A and B can be operated by a single operator, without any other assistance from other operators, repeater nets or bulletin boards.

Category C and D includes club stations, stations operated by more than one operator and single operator stations using repeater, spotting nets or any other assistance while operating.

The single transmitter category stations may use only one transmitter which is connected to the power source during the contest. In case of failure, it may be replaced by another transmitter. Spotting operators may only use receivers or transceivers with transmitter disabled.

The multi transmitter category stations may operate one transmitter per band simultaneously. All transmitters must be located within a 500 meter diameter or within the property limits of the station licensee's address. The antennas must be physically connected by wires to the transmitter.

Category E - Club Competition entries may claim a maximum of one station per category and power group on each mode (maximum 24). The final club score is the addition of individual highest scores made by the club members on both modes. Expeditions and mobile operations by the club members can also be counted. The club official must submit a list of stations, their category and scores.

8. Awards: First place certificates will be awarded in each category and power group in every participating country, call area and mobile group. The stations having the highest combined score from each country will receive a free one year subscription to *RADIOSPORTING* magazine.

9. Trophies and plaques will be awarded to the highest scoring stations in all categories. If one station would qualify for more than one trophy, the second less significant trophy will go to the next eligible station. Individuals, clubs, societies and companies are encouraged to sponsor a trophy. (Please contact WRC chairman.)

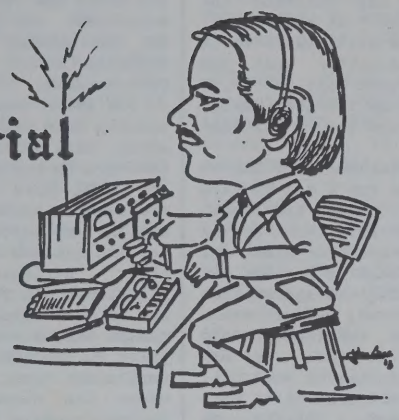
MIXED
World Champion - Multi operator, multi transmitter, W2PV Memorial Trophy donated by IRSA

10. Log instructions: All dates/times must be in GMT. All sent and received exchanges must be logged. Multiplier should be indicated only the first time it is worked on each band. Logs must be checked for duplicate contacts, correct QSO points and multipliers. Do not use separate sheets for each band, except for multi operator, multi transmitter stations who keep separate logs and numbering per band. Single operator stations must clearly mark the rest periods in the log and indicate the total operating time on the summary sheet. Sample contest form kit is available from IRSA for SAE and $1 or 3 IRC.

All participants are encouraged to send the log regardless of their score. They are needed for checking purposes. A one year subscription to *RADIOSPORTING* will be awarded to the 10 stations selected by a draw from the logs received.

11. Deadline: Logs must be mailed not later than 30 days after the contest to:
IRSA WRC Contest, Box 65, Don Mills, ON, M3C 2R6
Canada

ve3bmv Radiotorial



It seems that the DX spirit is down a bit with the declining of sunspots. We were used to the hot bands when we could work the world around the clock with very little effort. Nowadays, when we turn our radios on, we wonder if the receiver is dead or the antenna has fallen down. This is the time when it pays to follow the WWV and propagation indicators to see when are the good days to work DX. Bands can still open and provide a lot of fun and a few new ones. A good example was the CQ WW contest when the bands were wide open, with only 10 meters being short lived. Number of records have fallen.

Now is the time to concentrate on the low bands. There is increased activity on 160, 80 and 40 m bands mainly because the higher bands are closed during the night and what else is there to do? It appears that during the higher sunspot activity the propagation is actually better on low bands, but because of the higher atmospheric noise levels on the lower bands, most people avoid spending time down below 20 meters.

If one looks at the inverted Vee antenna at 30 feet as a work horse for that band to catch DX, then he will find it tough to work DX on low bands. The radiation pattern and the noise pickup is wrong for those bands. The low bands destroy the "reciprocity" myth between effective receiving and transmitting antennas. Many complain that they do not have the room for effective low band antenna systems. With some ingenuity and experimenting one can come up with some kind of contraption which may prduce amazing results. Read "160 m Weird Wire Antenna" in this issue. Also, see K7GCO's article about the low frequency ground wave antennas. Be carefull when trying to use the AC line as an antenna. If you are not aware or sure of the safety precautions involved, then try a different variety of "no power" antennas. We are not responsible for any accidents or damages.

It appears that when it comes to receiving on low frequencies, especially when we are in the proximity of city wiring, we have all kinds of "antennas" around us. It is quite often a question of just taping into them and supressing the noise. Verticals with good ground are great for transmit. They produce the needed low angle, but they pick up a lot of noise from the surroundings. We could achieve better results if we phase more verticals. We can steer the pattern and reduce a great portion of the noisy horizon. Don't be affraid to play with the receiving antennas. Quite often there are no rules for a good performance, just finding the best combination for your particular situation and surroundings.

While watching the election campaigns on the TV, I couldn't help noticing that some candidates were trying to get ahead by picking on the mistakes or faults of their opponents. At the same time very little was heard about their own constructive ideas or solutions. Anyone can sit around and criticize. We at *RADIOSPORTING* would like to bring some fresh air into our hobby, by promoting sportsmanship, fair play, quality and gentleman's behaviour. So far we are sponsoring DXCA award, World Contest Championship and as announced in this issue, the First World Radio Championship Contest. If you worked them all and are looking for different kind of world wide contest and awards, here they are. Enjoy them and please let us know if you have any comments or suggestions.

We'd like to point out that our DXCA also includes the new WARC bands. Who will be the first one to qualify? This is your chance to get on the Honor Roll without waiting for ten years. All those achieving the highest total in a particular category minus 10 percent, will qualify for the Honor Roll.

This month we welcome Paula Franke, WD9TBU, to our YL column. She will elaborate mostly on YL and little pistol problems, showing them a way to have fun in this jungle of high power trees.

Tom Rosebush, VE3KZE, is joining our staff writing the CLUB NEWS column. He is also compiling a roster of all the DX, contests and other live clubs. Please send news, pictures and information about your club's activities, members' accomplishments, etc. to Tom. (733 Annland St., Pickering, ON, L1W 1B5.)

Walt McGugan, W3FG, has offered to chair our World Radio Championship Contest. Welcome to all of you and we are looking forward to our cooperation.

We are looking for an editor and contributors to our VHF/UHF column. Due to the limited range at the VHF we need contributors from all the hot spots of VHF activity. We hope that our VHF friends will take advantage of our speed and perhaps convert a few of us from down below 30 MHz types to VHFers. There still are true hams on VHF that can talk about the technical stuff and build their own radios. They are dedicated gentlemen. (Do you know what your QRA Locator square is?)

We are announcing our new IRSA World Radio Championship Contest in this issue. The main goal behind this contest is to provide the best possible rules for contesters throughout the world. The only advantage for some areas would mainly be due to geographical location and propagation patterns. Shorter contest periods (24 hrs) should even out the advantage of "equatorials," who can sit there working the stuff, when up north the bands are dead. Questions open for discussion: Should we put guest operators into the multi operator category? Should the category of the competition code be included as a part of the contest exchange? The operator would then decide which category he is going to operate. This would keep you informed on how the other contesters are doing, what category are they in. We chose the first weekend of October, which should give us good propagation conditions, being close to the equinox. Any comments, suggestions or ideas?

We were not sending renewal notices to our old subscribers. Please check your label for expiry code. If it reads 8601 or less, the February issue is your last one, please renew promptly. We still have some back issues.

Good luck in the contests and DXCA hunting!

73 de Yuri

DX NEWS

ART HUBERT, N2AU

436 N. Geneva Street, Ithaca, NY 14850

The DX news from around the world as exchanged on the IRSA net and from other sources: Frankford Radio Club, Kansas City DX Club Newsletter, LIDXA Bulletin, QRZ DX, NCDXC CW Bulletin, South California DX Bulletin, Westlink Report, CRRL News, Worldradio, INSIDE DX, CQ Magazine, KE2C, DJ9ZB, VE3BMV, AB5A, FE6DZU, FE6APG, FB1BE, KA2AJT, KE2C, KQ2M, K4SV, KD4XN, KI4PL, K5VC, KC9NH, N4JF, NW5K, VE3FXT, WA6AHF, WC6I, ZS3PQ, ZS6BRZ and 7P8KG.
The IRSA net operates on Sundays around 14.200 MHz, starting at 2000 Z and 3.830 (Mondays and Fridays at 0200 Z).

1986 will probably mark the end of cycle 21 and the slow climb of sunspot numbers of cycle 22. Ten to eleven years ago, I read lots of articles of predictions about cycle 21. The general consensus was that it would not reach 100 and most predicted around a sunspot level of 80. But fortunately, the cycle was the second highest in a century and a half, reaching the 160 plus level, giving hours of DX pleasure on all bands from 6 meters to 160. So far this past year, I have not seen any articles concerning cycle 22. No predictions as to its maximum sunspot count or any other information. Are the lack of predictions or articles due to the fact that maybe we really still don't have enough of an understanding to predict a cycle? Anyway, let's hope cycle 22 will be as good or better than 21 was.

Being an active DXer myself, one of the topics that repeatedly surfaces in conversations among DXers is how to obtain QSLs from stations worked. Sometimes working DX is easier than confirming it.

Time answering QSLs is a definite burden to an active DX station. It means loss of on-air time when he can be working DX or chasing a new one he needs. It's also a hobby for him, and QSLing thousands of Ws and VEs is not much fun. Improperly filled out QSLs, insufficient return postage and postal thefts can also account for poor QSL response.

Let's see how we can increase the return rate of DX QSLs. At this time, let me say that there will always be a few stations that no matter what you try, a QSL confirmation will be 99.9% impossible. By talking to other DXers, you will soon learn who these stations are.

When QSLing a DX station, one has to remember he only needs one W and VE card for DXCC, so when he receives his 1000th W QSL card to answer for this month, this is definitely a chore for him. So, here's how you can make it easier for him. QSL cards with all the information on one side are preferred; if you use a two-sided card, make sure your call appears on the back-side also. Use GMT time. Never use local time on a DX QSL. If you do, don't expect a card; it most likely will be discarded. USE GMT. Be sure of your date and make sure the clock in your shack is accurate. A time difference of 5 minutes can mean your call appears three log pages away and even worse, a "not in the log" reply. If he is kind enough, he might search through the log for you, but don't put him through that hassle. Be sure of the frequency; occasionally some DX stations will keep logs by bands and if you indicate the wrong frequency, no card.

To help cut down on postal theft, the following procedures will help. Never write the call letters of the DX station and yours on the envelope. There is a tip off that there are IRCs or a dollar bill inside. If possible, write his full name on the envelope. Use a security-type envelope that you cannot see through when held up to a light source. Never include change (quarters, dimes, etc.) in an envelope. Unless the DX station asks you, don't put nice looking stamps on the envelope. Postal workers will tear them off and sell them to local collectors, disposing of the rest of the letter. Use metered postage.

There are several methods to provide sufficient return postage. The most commonly used method is IRCs. These can be purchased from your local post office, or occasionally they are listed on DX bulletins for sale from QSL managers at a reduced price. Make sure they are not out of date, are canceled properly, and not damaged. When you buy them this way, some foreign post offices will not redeem them. For instance, the Brazilian post office will not accept IRCs that have staple holes or have been folded. Make sure to include the proper amount of IRCs. In the front section of the Radio Amateur Callbook, there is a page listing the amount of IRCs needed for return postage by airmail by country. Or you can ask the DX station how many are required.

Another method which is used very often is by sending a dollar bill or in DX jargon a "greenstamp." But it has its drawbacks. There are some countries where it is illegal to have foreign currency in your possession; the USSR and Pakistan are two that come to mind. So, ask the DX station before sending a green stamp if you're unsure about it. This particular method of QSLing is probably 80% of the reason for postal thefts, so make sure the money is well concealed from the outside.

If you do not receive a QSL card from a station, before resubmitting, check among DXers and confirm the address. Sometimes the Callbook is in error or the wrong QSL route was given. To help supplement the Callbook for up-to-date QSL information, a subscription to a DX bulletin and or the QSL list will help considerably.

For those tough USSR cards, W3HNK can usually help you out. Send him the QSL along with sufficient postage to mail the card to the USSR plus SASE to return the USSR card to you. He is very successful on his returns. Sometimes writing a letter to the DX station, telling him you need his card for one of their national awards will work miracles. In the USSR, a complaint to Box 88 will help, but wait at least 18 months before complaining; cards through their bureau are very slow, and too many complaints about a station to Box 88 can cause the suspension of the station's license. As a last resort, and if you have a spare $5.00, you can send a registered letter. This will usually work in countries where there is postal theft.

One thing that can be frustrating is a card returned "not in the log." If the station you worked is quite rare or a new one for DXCC, when you work him, write down next to the log entry, one or two stations he worked before and after you. Sometimes by resubmitting a card with this information, he will be able to find you in the log or he might have mis-written your call in his log, and with this information, you might convince him it was you he worked.

I know there are other tricks and methods to help obtain that needed one, but by talking to other DXers, they will inform you to these. By following these methods, an avid DXer and good friend of mine, KE2C, has about a 98% return rate on DX QSLs, which is about as high as one can expect. So, these methods do work.

Don't forget the ARRL CW DX test this month. It's the world working the W's and VE's. Working DX on the low bands is easier in this contest. Hope everyone is progressing well on *RADIOSPORTING*s new award, the DXCA. The rules for this one are in the November issue.

73 and good DXing Art, N2AU

Lets see what's happening in the world of DX:

N. & S. AMERICA -

Rick, K5UR worked a UA9 on 160 in early December, giving him 35 zones worked on the top band. Can anyone else match this total?

PY1DEF and PY1VOY were portable from Trinadade (PY0T) for one day in early December. The military supply ship which provided the transportation, departed three days early. If you were one of the lucky ones to work them, QSL via PY1DFF.

WA6AHF, Ruben states that all FOOXX cards have been mailed, including the Bureau shipments. If you have not received yours, please resubmit.

Bob, KQ2M will be operating from Aruba in mid January, hopefully providing a new one. Aruba becomes politically independent from the Netherland Antilles on January 1, 1986. QSL this operation to KQ2M.

Rumor has it that Jin, JF1IST has

canceled his attempt to activate Peter 1 Island until next December. There is still a chance that KD7P will make an attempt by helicopter in January of this year to put it on the air. The Norwegian Government has assigned the LN prefix for Peter 1 Island.

FE6APG will be active from French Antarctica for one year. He will be active on 15-40 operating mostly CW. Some SSB operation will take place around 14195. QSL via FE6DZU.

G4DYO editor of RSGB's DX NEWS SHEET has heard a rumor that there will be an operation from South Georgia in early 1986 with the callsign VP8BFC.

OCEANIA -

George, VE3FXT will be touring the Pacific in the beginning of this year promoting the 1986 World's Fair being held in Vancouver this year. He will be operating from various spots throughout the Pacific.

Ron, ZL1AMO had to cancel his DX-pedition to ZK3 in November. When he arrived in 5W1 land he was minus half his equipment. It took the airline several weeks to locate it, so he had to cancel the trip. He might try again in March.

A35OG, was active from Tonga in December. QSL via SM6RYJ.

VR6JR, Jim will be leaving Pitcairn in early February of this year. He is very active on 75 meters. Check 3790 at 0730Z. QSL via G3OKQ.

VK7BC, Opr. Frank had a QSO with VU2GDG on 160 for the first VK to VU 160 QSO on the top band. He states that conditions have been poor on 160 into the East Coast. His last QSO with the East Coast was on October 26. You can find Frank on 14182 at 2100.

Father Cav, KC6JC has a new dipole up for 75 meters. Look for him on 3806 at 0730Z. He will be going to the WCI in March for several weeks.

EUROPE - SV9PR Opr. Eddy can be found on 14190 at 1430Z. QSL via Box 1325, GR7110, Iraklion, Crete.

3A5E has be active on 75 meters. Try 3778 at 0715Z. QSL via F9RM.

TKOKC/CER was a DX-pedition to Cerbicales Island off the coast of Corsica. It counts as EU-100 for the IOTA award. QSL via TK5EL.

Need a QSO with the Isle of Wight? Try G3RXC near 14250 every Sunday at 1000-1300Z.

JW6VAA is located on Bear Island and will be active until March. QSL via LA4YW.

AFRICA -

A22BW from Gaborone, Botswana has been showing up on 3790 at 0215Z. He will also QSO with you on 40 if you need it for a new one on that band.

FR4ZD, Guy is active on 14205 at 2115Z. He also works 40 meter CW. Look around 7001 at 0400Z. FR4ZN Opr. Phillip is also active on 20. Check 14181 at 2045Z. He is also very interested in making N.A. QSOs on 160. He operates on 1830 at 2230Z.

Steve, ZD8LIK will be active from Ascension for one year. He maintains three 250KW BBC transmitters on the island. QSL to Steve Hurst, BBC, Ascension Island, South Atlantic.

AX3PQ, Peter just recently licensed had been active on 15 meters. He is looking for stateside QSOs co complete his WAS, QSL to Box 37, Windhoek. ZS3Z operated by ZS6BCR was active for several days on all bands CW and SSB. QSL via ZS6BCR.

YASME - So far Lloyd and Iris have been active from ZS, ZS3, 7P8, and 3D6. Their next planned stop will be A22. All QSLs to YASME.

5H3HM Opr. Keith has been active on all bands operating SSB. He will be there for seven more months, working on a grain mill project. His home call is VE5VJ. QSL via VE5UJ. 5H3CE is active on Snooky's net on 14183 at 2000Z.

J28EI operator Danny has been quite active. Try 7001 at 2230Z, 3799 at 0100Z, and 1824 at 0300Z. QSL via FC1JEN.

5R8AL, Alain has been active on 15-80 meters. He skeds his manager WA4VDE on 21330 at 1700Z on Mondays and Fridays. Also check 14183 at 1800Z.

3D6BW, operator Dennis will be active from here for two more years. He is quite active on 10-20 with some activity on 40 and 80. QSL via AK1E. 3D6BU, Ron is on 14164 at 1900Z. He skeds VE3AGW at 1900Z on Sundays and Wednesdays. QSL via Box 64, Manzini.

Karl, 6W6NJ is active on 14215 at 2200Z. He will be there for another year. QSL via Karl Elsener, Catholic Mission, Gandiaye.

Stu, ex H44SH is back in England and will be going to the Congo (TN) in January 1986. He will try to obtain operating permission while there.

ASIA -

BVOBG - Barry Goldwater DXpedition operated on schedule from Taiwan by K7UGA, K3TW, K3ZJ and W3HHG. They were worked on 40 m. Quite a bit of activity coming out of BV land: BV2DA (DL7FT QSL mgr.), BV2FA (QSL via DJ9ZB), BV7JA is QRV from Kaohsiun, BV2GA is putting up 5 el. Yagi, BV7KA has kW running. Tim, BV2B and China Radio Assn. are busy importing 8 rigs from Japan, which should activate more station very soon.

Taiwan prefix allocation is as follows: BV1 - Keelung City, Yilan; BV2 - Taipei City, Taipei; BV3 - Taouen, Miaoli, Hsinchu; BV4 - Taichung, Nantou; BV5 - Changhua, Yunlin, Chiayi; BV6 - Tainan City, Tainan; BV7 - BVO - no change.

Robin, DU9RG had a QSO with XU1SS in early December. They are having receiving problems and their signals are very weak into the West Coast. They are using only 100 watts to a dipole at the present time.

VU2CVP and VU2DVP have been showing on 3696 nightly listening around 3803. Wenty, 6Y5IC has been helping out with the QSOs. Listen around 0100 to 0130Z. At about 0130 they QSY to 7080 to listen for stateside.

Lots of Asiatic Russian activity on 80 meters, some of the more active ones are: UA0FM on 3505 at 1130Z, RA0FA on 3749 at 1200Z, UA0FDO on 3502 at 1200Z, UA0ZAD and UA0ZDD on 3645 at 1210Z.

UI8BAA, operator Alex can be found on 7002 at 1215Z.

JT0XC has been showing on 7003 at 0145X. QSL via OK1XC.

TIDBITS:

If you worked D2BCW in November 1985, he was a pirate according to the Angolan Embassy.

During 1986, CQ Magazine will issue a special WAZ award to celebrate the 50th anniversary of WAZ. All bands may be used (no WARC) and contacts may be both SSB and CW. For details and forms, contact W4KA with a SASE.

Congratulations to 5 Band WAZ recipients: SM5AKT, CT4NH, and ZL4BO.

Mike, NW5K completed 5 Band WAZ with a QSO with VU2CVP in December on 75 meters. Contrats Mike.

Received a copy of INC Spots, the official publication of DX Incorporated, was very impressed by it. For a copy send 44 cents in postage with an no. 10 SAE to: DX Incorporated, P.O. Box 1082, LaGrange Park, IL, 60525.

ZS6BRZ will either operate from 3D6 or ZS3 for the ARRL Phone Test in March.

A new DX bulletin being published weekly, called INSIDE DX. For a sample copy, send an SASE to: INSIDE DX, 436 N. Geneva Street, Ithaca, NY, 14850.

GD3GCE was the former operator of VQ5DM, (5X5) in the late fifties.

Carlos, CT1FL can still supply you with a QSL from his operation as CR7GJ.

If you need a card from VS9KPH from the early '60s, try W3HPO.

PA0KOP can supply QSLs for his operation as JZ0HA.

Likewise, KP4CL can supply you with a pasteboard for YA1DAN operation in the late sixties.

Does anyone know the whereabouts of the following? ZC5FF, VS4JT, VQ1IZ, and CN2BE, all of the late '50s, and ZC4GB operation around 1972.

To make this column as informative as possible, I need input from RADIOSPORTING readers. In addition to the IRSA net frequencies and times I will also be on 14.250 MHz at 2300Z Tuesday evenings and 3.830 MHz at 0200Z Friday mornings. Also, information can be sent to me at my home address and I will reimburse your postage costs if you wish. Thank you for your help.

160 m Bulletin

Founder -
Stu Perry, W1BB

Top Band News Americas

Dennis Peterson, N7CKD

4248 A Street SE, Space #609
Auburn, WA 98002,Phone (206) 833-7243

THE ARRL 160 CW CONTEST

The ARRL 160 m CW Contest is now history. At least for some of us. We would like to think of it as such and hopefully return next year with a better perspective towards improved band conditions. This year's contest seemed to be lacking a great deal in participants as compared to last year's test.

DX conditions and propagation were down tremendously compared to last year. One noticeable big difference over last year's contest was the absence of the European signals especially the first night (Friday). They weren't any better the second night either. Many East Coast stations we normally work from the West Coast, were sometimes just barely audible above the noise floor. An absence of even some of the Caribbean station and even South Americans, made it almost impossible to obtain any type of DX count whatsoever.

The first few hours were rather a drag here locally except for some of the operators who were able to loft an antenna up into the air at heights of 125', 145' and in some cases even higher. It seemed as though the operator at W7RM (W7WA, Danny) had no problems in working many stations heard by virtue of Rush's newly installed bi-square antennas. Four (4) of them to be exact. Yes, 4 of them, and each one is fed independently of the others using a parallel resonant circuit to tune them. Each square as I understand it, is a half-wave length element open at the top and fed at the bottom side. They can be fed one at a time using the unused ones as reflectors. W7RM can switch to any one in a particular direction at a flip of the switch. I think that it is only fitting to mention that this station was 4 hours or more late in getting started in the contest. Danny never reached the W7RM QTH until after 8:00 or 9:00 p.m. giving the rest of us a good head start.

It didn't matter, as Danny knew exactly what he had to do and how, in order to obtain the QSO rate that he did, for the first four (4) hours. That QSO rate was about 60 or 65 per hour. We couldn't believe our ears when we first heard them operating, they were actually hearing stations long before we were and we were using an inverted-vee up at about 95 feet.

We decided to just plug away at our current pace and hope that 'OLE MURPHY would stay at home and not make any unexpected appearances this contest period. Stations on the West Coast were fortunate enough to have a fairly early and profitable JA (Japanese) opening. As many as 75 JAs were worked during the contest and as many as 25, 36, and 41 in one session.

A request was made for stations to share their final tally with us so we could submit it for publication in this issue. Gaining their approval to have these figures published was not as hard as I thought it was going to be. As I didn't acquire any information from the East Coast operators, I therefore could not list any scores from these operators. In the future, if anyone wished to share their scores and see the estimated results in advance; all I ask is that you send me a post card or letter signed by yourself authorizing me to publish your results for all to see. The following list is that of a few of the operators here locally in the Seattle area who operated multi-op plus a couple from the Portland, Oregon area and one from the Denver, Colorado region.

Call Used	QSO Total	Mult. Total	JA Total
WOZV/CO	709	83	16
W7RM	575	75	75
AI7B	477	67	47
K7SS	465	74	33
N6TR/7*	430	71	40
K7QQ	400	66	22
KG7D	337	67	24
K7IDX	210	64	18

*NOTE This station only operated until midnight of the second night when his amplifier blew up and he decided to give up for the rest of the test.

SINGLE OPERATOR			
W7AWA	345	67	07
W7TJ	200	61	??

The following short list is an example of some of the DX stations heard/worked from this location, here on the West Coast. There are no doubt others that could be added to this list, but at this writing I do not have that information available.

Call	RST Hrd/Wkd	Freq. in KHz	Time UTC
UA0ZBP	599W	1831	1431
DL3DS	439H	1835	0500
J73AH	449H	1843	0250
W5YWU/HR	559H	1843	0245
ZP5XDW	439H	1831	0456
UG6GAW	339H	1835	0408
FM5WD	569W	1834	0651
SM5BIC	439H	1831	0710
VS6DO	569W	1823	1524
VS6DO	599+20W	1824	1530

TOP BAND AID FOR 160 DXing
"Frequency LISTING FOR 160"

WORLD TOP BAND FREQUENCY UPDATES

PREFIX		COUNTRY	KHZ/CW	KHZ/SSB
FA-FE*		FRANCE	1830-1850	1830-1850
FT8W	*	CROZET	1830-1850	1830-1850
FT8X	*	KERGUELEN	1830-1850	1830-1850
FT8Z	*	AMSTERDAM	1830-1850	1830-1850
HC		ECUADOR	1800-2000	1800-2000
HC8		GALAPAGOS	1800-2000	1800-2000
JT		MONGOLIA	1820-1850	XXXX-XXXX
JY		JORDAN	1820-1850	XXXX-XXXX
SU		EGYPT	1810-1830	XXXX-XXXX
TJ		CAMEROON	1810-1830	XXXX-XXXX
TK	*	CORSICA	1830-1850	1830-1850
TN		CONGO	1810-1830	XXXX-XXXX
TT		CHAD	1810-1830	XXXX-XXXX
V44	*	ST KITTS	1800-2000	1800-2000
YB		INDONESIA	1800-2000	1800-2000
YI		IRAQ	1810-1830	XXXX-XXXX
Z24		ZIMBABWE	1810-1850	1810-1850
3B6		AGALEGA	1830-1850	1830-1850
3B8		MAURITIUS	1830-1850	1830-1850
3B9		RODRUGUES	1830-1850	1830-1850
3D2		FIJI	1800-2000	1800-2000
3V		TUNISIA	1810-1830	XXXX-XXXX
3X		GUINEA	1800-1850	1800-1850
3Y		BOUVET	1802-1850	XXXX-XXXX
5A		LIBYA	1810-1830	XXXX-XXXX
5H		TANZANIA	1810-1830	XXXX-XXXX
5V		TOGO	1810-1830	XXXX-XXXX
6O		SOMALI	1810-1830	XXXX-XXXX
8R		GUYANA	1810-2000	1810-2000
9J		KUWAIT	1800-2000	XXXX-XXXX

* denotes new prefix designator

Anyone who is interested in the frequencies to which a particular country is allocated on 160; this listing is considered as one of the most important tools for operating and DXing on 160. Look at it this way, "If you don't know where to look, or what part of the frequency spectrum they are allowed to operate in; you could miss a very valuable QSO and a NEW COUNTRY." This listing has just been revised as of December 19, 1985; and there are a total of 317 Total Countries on the ARRL Total Countries List.

As of this writing, there are 260 countries listed in this listing with either CW, SSB or both limitations indicated. The section in this column for 160 dealing with "WORLD TOP BAND FREQUENCY UPDATES," is that section which will appear periodically with these various updates and revisions for those who already have this MASTER LISTING. All that is needed is to add or delete from that list what is printed in this column of the magazine to keep or bring your listing up-to-date. Four years ago, we started with only 8 or 10 known countries as to their operating limits. Now, after 4 years of compiling information and records, we have what is known today as "THE WORLD TOP BAND FREQUENCY ALLOCATIONS LISTING" 1985. As many of you can see and are able to attest to this listing, there are still a few countries that we are lacking their TOP BAND (160) frequency allocations for CW/SSB, etc. If anyone can help with corrections, additions

and/or deletions, please forward them to me. The price is still $5.50 for US/US possessions, VE, and XE operators, mailed FIRST CLASS; $7.50 for DX and all other overseas mailed AIR MAIL. (See address at beginning of this column.)

CAN YOU HELP ME?

As the title of this article indicates, I am once again vying for your helpful hand in sending and providing me with any type of information which could be used for this column in the magazine. It makes no difference as to whether it is DX news, rag chew sessions, a particular net that meets at a designated time and frequency with particular interest shown towards specific or general topics.

Photographs are welcomed as well. Especially group types, and even photos showing a different type of L-network, pi-network, parallel tuning networks etc., and if you are able to get good clear shots of your individual antennas whether they be dipoles, bi-squares, loops, verticals or shunt-fed towers; all are welcome and would be most appreciated to further the content of the 160 column for others interested in getting on the band and joining our ELITE GROUP of operators.

I can write about various things and different antenna topics each month, but that doesn't always mean that this is what you "THE READERS" want to read about. So, I need your help in providing me with what ever type of info and NEWS that you may have available. I'm certain that Wally/LZ2CJ the DX News Editor from Europe will be doing the same, and what better way to share ideas abroad than through this magazine and even a possible personal letter to one of our DX readers, or even one from them to us.

Amateur Radio is solely based on COMMUNICATIONS; I personally don't think that we need to restrict our communicating to strictly cw/ssb/rtty etc., etc.... I enjoy writing and sending letters once in awhile, and receiving replies from same. (This is an invitation to all DX as well as stateside operators to let me know what you think, and to add somewhat of a more personal touch to the 160 column here in *RADIOSPORTING* Magazine). We are continually seeking new operators with new ideas and different antenna designs for use on top-band.

Therefore, YOUR HELP is in much demand in order to make this column interesting, informative, educational and successful (IIES). Believe it or not, in certain areas on antennas, and even various types of ground systems; there just isn't a whole heck of a lot of information available. With YOUR ideas, findings, reports and records, and experimental sessions; we can provide this info here in the magazine and hopefully compile a resourceful library of information for all to use and enjoy.

1.CAN YOU HELP ME?

2.WILL YOU HELP ME?

3.PLEASE HELP ME ANYWAY YOU CAN!

Thank you, 73 Dennis, N7CKD

POLARIZATION OF A LOOP

Bob Eldridge, VE7BS

One of the VK stations on 1832 kHz recently asked why a Delta Loop antenna is said to be vertically polarized when fed at one bottom corner, as "45 degree wires are just as much horizontal as vertical." It occurred to me that this observation is true only of a single wire, and that exploration of this theme may be of interest to readers of *RADIOSPORTING*.

In the case of a loop fed at the bottom corner (or preferable just above it, to leave just a quarter-wave between the feed point and the apex, and put the current reversal point exactly at the apex) the vertical components are additive, but the horizontal components are opposed. So the "array" is effectively vertically polarized. When the loop is in the form of an equilateral triangle, each vertical component is stronger than each horizontal (because the right and left sides of the triangle are each at 60 degrees from the horizontal, rather than 45) as well as being additive.

When you feed a full-wave loop at the bottom center you have more or less two horizontal dipoles in phase. If you feed it halfway up one side you have more less two vertical dipoles in phase. Each dipole in a full-wave square loop has its ends bent, but not much current flow at the ends so little is lost. But the dipoles are not far enough apart to get 3 db gain from the stacking. You can play with the arrows and show that middles of each pair are in phase and the ends are out of phase.

Playing with these two explanations, on could say that if you divide the delta into right and left halves, the best point to feed it for vertical polarization is in the middle of one of the halves (which is always part way up one side). The same goes for any shape of loop; the only difference between the circular and square loops is that in the case of a circle the transition from vertical to horizontal is gradual instead of sudden.

The best gain comes from the loop which has the greatest area from a given length of wire (a circle). It is fascinating to play with the arrows and the angles. Especially if one-half of the "array" is below the ground and imaginary, because this brings the additional complication of sometimes reversing the direction of the arrows in the image. (VE7BS)

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YOU DON'T HAVE TO BE A DXER OR CONTESTER TO ENJOY RADIOSPORTING!

160 m DX News

Wally Stefanoff, LZ2CJ

PO Box 73, Levski, Bulgaria

1985 CQ WW DX PHONE

To keep the line with the info from January issue of the column, here are some more comments on CQ WW DX Phone 85!

Everybody here in Europe was complaining about high QRN level and appreciating the sudden openings to some good DX areas at the same time.

Pierre, HB9AMO has even gave up the contest because of QRN at his location!

It seems like I've had some kind of pipeline to USA on the first morning because a number of guys I've talked to said they didn't copy anything from those I've been working. Riki who has operated both parts - SSB and CW as K7NJ/4X (usually 4X4NJ) (to be able to work with USSR) told me that he has worked USA second night but did not hear anything the first one! It was completely the opposite in my QTH and that's why we love TOP BAND so much. Nobody can predict anything on 160 meters and that keeps the ball rolling at any time there.

After I saw the 1985 CQ WW DX 160 m SSB contest final scores I would love to share my happiness with all of you because I've ended up in second place in EU after having 10 hours of power blackout. This is a true happiness, isn't it? I also have to apologize to all of you for listing UZ1OWA as an usual UA1 station in first issue of "160 m NEWS" in December, because it is not an usual UA1! That is the Franz Josef Land club station we've been waiting for on 160 m for such a long time. With all those new USSR call signs on the air now, I missed to call UA1OWA myself thinking of it as usual UA1 and I missed a new one finally Hi!

The funny thing was that UZ1OWA operator was calling CQ for quite a while that particular evening but haven't been able to create any pile up, though! I suppose most of the guys were thinking of UZ1OWA my way Hi. So to make it clear to everyone UZ1OWA heard at 2140Z on 1840 kHz CW is a Franz Josef Land club station.

UZ9AYA (op Willy) and RA9AKM (Mike) have got the schedule with UZ1OWA on 7th of December at 1900Z 1833 kHz CW (I also was there at the time) but nothing heard from FJL that time!

Have anyone of you counted how many 160 m DXCC awards have been issued to the stations on different continents ? When I did it, the situation really "knocked me out." Out of 109 awards issued till 1st of September (according to info from K1MEM) 78 are going to North America (75 to USA). Only one goes to Oceania (VK6HD) and one to South America (PY1RO). there are 24 "160 m DXCC" awards in Europe and 5 in Asia.

Africa still needs its serious TOP BANDER so to speak. (You all know what is the QRN level in that area of the world.

Until today (15 Dec. 1985) I've received 160 m DXCC countries count for new current TOP TEN continental listings only from EU guys. Please spend a couple of minutes and drop me a line.

Now, some more info about CQ WW DX CW 85. I've got a letter from UG6GAW, Karlen couple of days ago. He is complaining on high QRN and QRM levels during the contest. UG6GAW has worked 335 QSOs, 46 countries and 16 zones.

He says he has done better than K7NJ/4X Riki. (They have talked each other after the contest.) In the best case that means that Karlen could have about 63 K points as a final score. UG6GAW worked some YOs, USA, YVs, JAs and HZ1HZ, VS6DO, 9M2AX, VK6HD, JT0EC, EA9CE in the test. The interesting thing is that Karlen missed quite a number of EU countries at the same time OE, GW, GU etc. UG6GAW's last new ones are CY0SAB, OH2BEN/C56, W8ILC/V2A and he has 136 wkd/102 cfmd.

Karlen sent application for 160 m DXCC a few days ago. I've been told by him that he has worked and even has confirmed ON8FW on 160 m. (Anyone to confirm that information ?) If ON8FW was "OK" then we have activated ON on TOP BAND. LZ2CJ station has been operated by LZ2SC Stefan in CQ WW DX CW 85. Stefan made 619 QSOs, 72 countries and 21 zones with estimated score of about 83500 points. As you all could see that could be a new world record, we will have to wait and see.

After I've received Dennis's N7CKD QSL card I can say now, that first ever QSO between LZ and West Coast of USA has been made on November 23rd 1985 at 0152Z. LZ2SC was not sure if N7CKD got his 43920 report "OK" because EU QRM was so high that Stefan missed that final "K", but after QSL was received here everything was confirmed? I believe LZ is the most eastern located country in EU from where QSO with West Coast has been made. (Any other info from anyone else on this matter ?)

LZ2SC said propagation was outstanding first night and band was very clean (no QRN at all). He in spite of that worked smaller number of USA stations then expected, he worked also 30 JA's! Americans were stronger during the "small" peak between 0000Z 0200Z than at 0400-0450Z. N2AA as in SSB part had again the biggest signal from US on CW. Stefan said sunday evening after 1800Z band was a real mess and even EU signals were very difficult to be picked up because of QRN. So before proceeding with activity information here is some more about Top Band and Top Banders in Sweden. (Thanks SM5DGA for info).

TOP BAND IN SWEDEN

Swedish amateurs used to have the 160 m band before WWII and got it back since 1st of April 1982. SM5DGA, Jan was among the first SM's to appear on 1.8 MHz. SM's are allowed to use 1830-1845 KHz portion of the band, CW only. No more than 10 watts input must be used on 160 m. Swedish amateurs are not allowed to operate in contests on 160 m. (I've been called by some SM's in different contests and I worked them, so what for example CQ WW DX contest committee members would say about that - do we have to count those QSO's and multiplier?)

There are at least 2 SM stations (SM6EHY and SM7BIC) who have worked more than 100 countries on 160 mtrs but nobody has 100 confirmed yet. SM5DGA has 83 wkd/80 cfmd.

Jan says he lives 4 km south from Uppsala at a 2000 square meters place that is fine for ham radio. SM5DGA has Marconi type and dipole antennas for 160 m. Rigs are TS830S, Collins S line 32S1 + 75S1, Drake T4XB / R4B. Jan has 312 DXCC total on all bands and over 100 countries on each of 80, 40, 20, 15 and 10 mtr band confirmed.

ACTIVITY INFORMATION

EUROPE

UB5HJO	1620Z	1842 kHz	
UB4IAG	1630	1840	
RB5AER	1623	1839	
RB4IWN	1625	1839	
UB4IEV	1635	1873	SSB
RB4IHK	1630	1862	SSB
UB4IOQ	1635	1841	
RB5LHT	1634	1834	
UB5SJL	1725	1839	
UB4MPC	2146	1841	
RB4ISN	1705	1860	SSB
RB5IGD	1705	1860	SSB
UB5QMY	2011	1845	
RB4IVG	2100	1834	
UB4IZM	1945	1840	
UB5IFZ	1947	1833	
UB4JAT	1621	1830	
RB5KGM	1622	1833	
RB5LMW	1630	1849	
UB4MAG	1635	1848	
RA6PBT	1633	1830	
UA3QRS	2046	1832	
UA3ZIS	1632	1841	
UA6LYS	1637	1831	
UA6BHB	1705	1860	SSB
RA6ATW	1705	1860	SSB
RA6AEV	1705	1860	SSB
UV6ADP	1705	1860	SSB
UA4LFC	1725	1834	
UA1WBE	2147	1842	
RA3WED	2152	1846	
UA3LIG	2151	1845	
RA3NAD	1635	1838	
UV6HCM	1635	1838	
UA3EEE	1640	1848	
UZ3TWY	1642	1847	
UA4YAQ	1645	1833	
UA3QPV	1946	1837	
UA4COL	1947	1833	
UW3QR	2220	1835	
UP2BPP	1625Z	1832 kHz	
UC2SQC	1630	1867	SSB
UC1SWI	1635	1867	SSB
UC2WAS	1725	1836	
DJ5UZ	1944	1833	
DJ6EN	2048	1833	
DL0DDB	2124	1835	SSB
DL9CQ	1950	1824	
T77C	1944	1833	
G3SZA	1959	1835	
G3YRO	2015	1846	SSB
G4JLH	2017	1846	SSB
G2FTS	2036Z	1847	SSB
G4GOF	2124	1847	SSB
G4LMZ	2124	1847	SSB
G3RTY	2132	1823 kHz	

4U1 Geneva

4U1ITU	2026	1846	SSB

(op. VE7AB on Nov. 11th '85)

IK0BYO	2015Z	1846	SSB
IK1ASR	2040	1840	SSB
I2ZGC	2045	1840	SSB
IK1GPH	2056	1832	
IK0CYP	2056	1832	
IK5DVQ	2146	1841	
IS0PLQ	2040	1840	SSB

(op. Livianne, she is active almost every weekend and also in contests.)

SM7BIC	2100Z	1832 kHz	
SM6BST	2149	1843	
SM6CTQ	2250	1838	
SM6BJA	1645	1834	
EA6NB	2048Z	1833 kHz	
OK2KET	2046	1832	
OL0CRG	2130	1835	
OK2BWY	2145	1838	
OL7BLO	1709	1833	
OK1VXX	1958	1830	
OZ7OP	2134	1832	
SP1DPA	2246	1834	
SP7KTE	1623	1839	
SP5INQ	1840	1834	SSB
YU4FDE	2209	1829	
YU2TW	2207	1832	
OH1XX	1820	1833	
LA4NB	1841	1835	

CT1FL reported active in 160 m SSB
CT1AOZ was active on SSB in CQ WW DX

F6BKI	2215	1832 kHz	
F6BWO	2220	1831	

Both also active on SSB

OE1KW	1640	1833 kHz	
OE3ARK	1725	1837	
HB9AMO	1615	1834	
	1930	1840	SSB
	0500	1841	SSB
PA0HIP	1930	1833	SSB

SV8CS, Spiros has built first remote controlled station in Greece. He's commanding his 2nd station with a 70 cm band walkie-talkie. The rig at his second QTH is also TS 430S! SV8CS has erected an Inverted Vee, instead of planned vertical antenna on 160 m this season. Unfortunately he did not have time to work on the vertical project last fall. I've already worked him on 160 m and have to say that his audio was great via that 70 cm walkie-talkie. SV2QI Harris has also been on 1841 kHz SSB. He is using computer to work DX on CW.

ASIA

UZ9AYA	1845Z	1830 kHz	
RA9AKM	1845	1830	
RA0QA (WAZ 19)	2220	1833	
RA9YG	1627	1843	
UA9WIC	1720	1839	
UA9SEX	2141	1837	
UA9MDV	0105	1835	
UA9GZ	0110	1835	
UA0AF	2354	1831	
RL7FFQ	1952	1835	

UG6GAW active almost every day at sunset and sunrise CW and SSB

UD6DAY	2150	1849	
UM8MK	2210	1832	
JTOAPE	2302	1833	(see January issue for more info on that stn)
UI8VAA	0055	1830	
4X4NJ	0008	1833	Riki was active as K7NJ/4X CQ WW DX 85

VU2GDG 0100 1840 SSB

Since VU's have been allowed on 160 m VU2GDG was the first VU reported active on the band. VU2GDG have been worked by a number of USSR Asian stations and some Europeans.

HL9AA and HL9KW reported active on 160 m

9M2AX	1630Z	1830	(He was active in CQ WW DX CW)
OE7RKH/YK			reported active on 160 m
ZC4ESB	club stn active in CQ WW DX SSB		
ZC4MR	CQ WW DX CW		

AFRICA

EA8QO	0008	1832	
5H3BH	2217	1834	(QSL via SM0DJZ, Leif is back home since 2 Dec., '85)
OH2BEN/C56	2236	1824/1830	split
5L2CJ	2237	1833	

J5WAD Vlad has been worked by PA0HIP on 1.8 MHz. Vlad is back in USSR at printing time.

OCEANIA

VK6HD	Mike is active every day 2030-2130Z. Frequencies are 1824, 1832 or 1835 kHz. VK6HD was in CQ WW DX CW and SSB part with excellent signal.	
KX6DS	1846	1832
KH6CC	1045	1830
ZM8OY	0600 0800Z	1819-1833 kHz
H44IA	1900-1915	1824-1826
P29PR	1920	1826
ZL2BT	1800	1832 kHz

Finally CQ WW DX CW and SSB plus CQ WW WPX CW and SSB contests have been recognized and included into "Bulgarian HF Radiosport" official contest calendar. (LZ2CJ)

EAST GERMANY ON 160

Y34K

GERMAN DEMOCRATIC REPUBLIC

The special club station Y34K will be active on 160 m with good equipment and antennas transmitting from 1830 to 1850 kHz on SSB in 73 SSB contest. The CW operation will be on January 24 to 26 during the CQ 160 m DX contest.

QSL cards 100% via Y24UK, Lothar Wilke, Eislebener Strasse 14, DDR 506, Erfurt, East Germany

N3RW FROM SURINAM

This note is regarding my planned trip to Surinam in March of 1986. I am a physics teacher at the High School of Engineering & Science in Phila. A group of teachers from the Science Dept. at the school are planning to travel to Surinam in order to do spectral-emission photography of Halley's Comet.

A gracious offer has been made by PZ1BG to offer assistance to our group. I have received permission from VRAS (the amateur radio society in Surinam) to operate. I have made the formal applications and I expect to have a license soon.

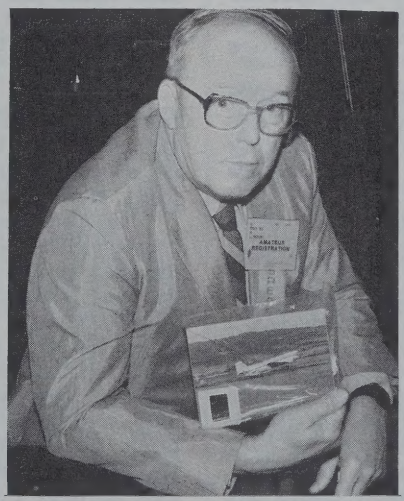
We had originally planned to be in Surinam about mid-March but a full moon in mid-March forces us to shift our observations either 2 weeks before or after that date. Steve, W3BGN, suggested the possibility of coinciding the trip with the ARRL phone contest. The weekend of that contest is 1, 2 March. The moon will be waning between last quarter on the 3rd to new on the 10th, so there is a good possibility at this time that I will be there during the contest weekend.

At the present time, the school owns a TS-530's so I have a rig to take with us. No definite plans for antennas yet but I expect they will be "wires" based on the amount of gear that we need to carry for the photographic work. I am open to any suggestions from those experienced in DXpeditions. One of the chemistry teachers going with us has a tech license, N3AMF. He is working hard on getting his General before we depart - so there could be 2 operators.

That is where we stand to date. When I received my Oct QST, I looked for PZ operation before I looked at my own scores. There was NONE! Needless to say, a PZ operation should provide more than my usual 100k per contest.

Rob Welsh, N3RW

VE3FXT



Dr. George Collins, VE3FXT, etc. is displaying the photograph of one of the airplanes to be used for trip around the world sponsored by the British Columbia government to promote Expo 86 in Vancouver, B.C. He is planning to participate in the flight and activate many rare countries on this trip. George gave very entertaining talk at the RSO Convention in London, ON. At the present time George is operating from various African countries.

QSL INFORMATION

A22BW	DK3KD	TR8AHO	DK1PO
A22DP	W7GVC	TR8DR	W2PD
A35SA	JM1MGP	TT8/N7DF	K∅ HGW
A35ZH	W6ZH	TU4BR	KN4F
A4XJQ	G4MSX	TZ6WC	DL4BC
BV2DA	DL7FT	UK9NM/LH	DJ5CQ
CN8CC	F6FNU	UO9YR	KA4SPA
DX1N	JJ3FMP	UR6JR	G3OKQ
D68DX	PA∅ GMM	XU1SS	JA1MQG
EA8/DF3IS	DF3IS	XX9SP	KS7P
EA9NW	EA4GBL	YK/OE2AWN	OE2AWN
EA9RY	EA9IB	YK/OE7RKH	OE7RKH
EL2CJ	JF2QHC	ZD7CW	N4CID
FH/PA∅ GMM	PA∅ GMM	ZK1CY	W6KNH
FK8CR	F6EWK	ZL7UW	ZL2UW
FK∅ AW	F6BFH	ZS3IL	ZS3HL
FP/W1CCN	K1RH	ZS3KC	K1ZLA
FP/K1RH	K1RH	3A2LF	JH2QFI
FT8XB	F1FLN	3A/IK1CJT	I1FOU
FY5YE	W5JLU	3B8DB	K5BDX
HB∅ NL	HB9NL	3D2DM	KE4DC
JW∅ P	SP2HMT	3D6BG	G3ABK
JY5CI	G4WFZ	3U8AM	DF6RS
JY6FH	G4BWP.	40∅ IYY	YU2AKL
JY9RL	WA6POZ	457UK	DJ9ZB
JY9BU	G5US	5N1/N5CJB	K4ZKG
KH∅ AC	K7ZA	5N3BHF	OE6LAG
KX6/N6HR	N6HR	5N∅ /W4HHU	KR4Y
LX/ON6CK	ON6IJ	5N∅ /JR8BUU	JA8FCG
OD5BP	DL1FZ	5V7RW	WB4LFM
OD5ZX	I7AAP	5X5GK	DJ5RT
P29PNG	P29JS	5Z4ET	N5DFT
ST2/WA4BWB	WA4BWB	9L1JW	DJ∅ GN
SU/9Y4RD	KA2DDJ	9M6MO	KO2A
DL1FZ/SV9	DL1FZ	9M6MU	N2CW
TF/A1SP	W3HNK	9M8EN	G4RZQ
TK/DL4FF	DL4FF	9G/DL∅ MAR	DJ6SI(CW)
TK/FE5RU	F5RU	9G/DL∅ MAR	DJ5RT(SSB)
TL8CK	F6EWM	9Q5MA	PA∅ GAM
TN8EE	F6ECX	9U5JM	F3LQ

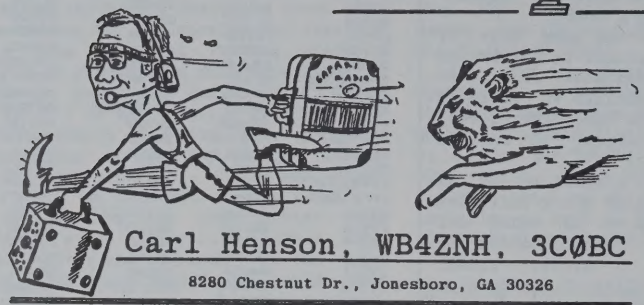
DJ5CQ; R. Mueller, Alter Main 23, D-8601 Ebing
DJ5RT; W. Ruppert, Riesenkopfwef 7, D-8209 Schloberg Stephanskirchen 1
DJ6SI; B. Drobnica, Zedernweg 6, D-5010 Bergheim
DK1PO; D. Weissbarth, Theodor Heusstr 13, D-6509 Biebelnheim
DL1FZ; H. Muschner, am Steffen 10, D-6430 Bad Hersfeld
DL4FF; V. Havran, Coutandinstr 23, D-6082 Moerfelden Walldoorf
F6ECX; R. Rouffet, 1 Impasse de la Verrerie, F-03270 Saint Yorre
G3OKQ; J. Russell, Greenfingers, Oyster Ln. Byfleet, Weybridge, Surrey
I1FOU; A. Foglia, Via Novara 62, I-28024 Gozzano
I7AAP; A. Andriani, Via Terliz C Sedell 1, I-70056 Molfetta
J28EL; Box 2411, Djibouti
K1RH; R. Hirsch, 172 Newton Rd, Woodbridge, CT. 06525
KE4C; F. Williams Jr, 106 Del Los Angeles, Milton, FL. 32570
KA4SPA; M. Stahl, 4512 Hessian Ct, Virginia Beach, VA. 23462
KS7P; H. Davidson, 11944 SE Brookside Dr, Portland, OR. 97266
K∅ HGW; J. Strain, 6450 Clybourn Ave, North Hollywood, CA. 91606
N6HR; H. Raamat, Box 60611, Sunyvale, CA. 94088
PA∅ GAM; G. Menting, Oldenoert 152, NL-9351 KT Leek
PA∅ GMM; G. van der Berg, Tweeboomln 117, NL-1624 EC Hoorn NH
SP2HMT; R. Chmielowiec, Zelistrzewo, 84-122 Zelistrzewo
W6KNH; C. Schoenfeld, 42 Donald Dr, Orinda, CA. 94563
W6ZH; H. Hoover ■, 1520 Circle Dr. San Marino, CA. 91108
W7GVC; P. Stewart, 1404 Ruth Ave, Walla Walla, WA. 99362
ZD7AL; Box 25, Jamestown, St. Helena IS.
ZD7XY; Box 54, Jamestown, St. Helena Is.
ZL2UW; R. Naulls, 14 Miriona Grove, Paekakiriki
ZL9AA; P. Fisher, 2 Airport Dr, Hokitika
ZM7PM; Box 7344, Wellington South, New Zealand
3D2DM; Box 184, Suva
5H3TM; Box 1426, Mbeya
JH4EIY/5N1; Box 2764, Lagos
9J2DS; Box 71831, Ndola
9U5JW; Box 2426, Bujumbura

Tnx DJ9ZB

ham radio

Internationale Amateurfunk-Ausstellung
4.–6. Juli 1986
Friedrichshafen
Bodensee

DXpeditioning



Carl Henson, WB4ZNH, 3CØBC

8280 Chestnut Dr., Jonesboro, GA 30326

In October of 1979, Martha (WN4FVU) and I left for Kinshasa, Zaire on DXpedition. We had chosen October in order to participate in the CQ WW Phone Contest. That had been part of our request when we spoke to the Minister of Telecommunication on the phone. We wanted to represent Zaire in this, the Olympics of Amateur Radio! We had been promised on the phone, but being a little on the conservative side, we decided that some back-up arrangements were in order. A letter followed by a phone call to 3D6BK (in Mbabane, Swaziland) gave us someone to help us if necessary. Brick assured us that it was easy to get the 3D6 permission.

Next we made our travel arrangements. We chose Sabena, Belgium World Airlines, since they had just started up service non-stop from Atlanta to Brussels. After changing planes in Brussels, we could fly direct to Kinshasa. The same flight went on to Johannesburg, Republic of South Africa and it would be a simple matter to catch the flight another day and still have one plane service back from Johannesburg to Brussels. Only one carrier would be involved greatly simplifying the travel arrangements. Martha and I had flown Sabena before and always enjoyed it.

Gary Helton, WB4CSW, our QSL manager for the 9Q5 operation, works for the same company that I do and knows my supervisor. I arranged with Gary to notify my supervisor if we needed an extra week's vacation.

We arrived in Kinshasa on Friday night, a week before the contest. We were befriended by a real live soldier-of-fortune and educated in the ways of the (third) world. That weekend hanging around the bar by the pool at the Intercontinental Kinshasa, I heard people speaking American. I introduced myself and was quickly taken into the group like a long lost friend. The group was made up of construction workers working on the power line that should go from Inga to Shaba across Zaire. One of the beer drinkers, when he found out that I was a Ham, said, "One of our guys is a Ham, but he never could get permission to operate." I gave the fellow our room number and told him that I would like to meet this gentleman.

Sunday morning, Les Kolb knocked on my door. I can't remember Les's callsign then but it was a K3. We had a nice visit and Les explained that he had refused to pay a bribe in order to operate Ham Radio. Les is that way, straight as an arrow. He volunteered to translate for me at the PTT and by Thursday we had the permission in hand without paying a bribe! Les reckoned that the reason for our success was that the Minister must have been impressed by the person-to-person phone call.

That evening Martha and I took a break from operating when Les and his wife, Sandi, brought a bottle of champagne to our hotel room to celebrate our success. That sure confirmed what I already knew; Les Kolb is a terrific individual with great Ham spirit!

I can't say that our 5 day operation as 9Q5DH and 9Q5WH (the PTT had used the last two initials of our name for the suffix) will go down in history as a particularly spectacular DXpedition. I will say that I would not have missed it for the world! Especially, making such fine friends as Les and Sandi Kolb.

Les and Sandi have drifted through our life once or twice since then but only on the telephone, cards, and on the radio. Les gave up contract work for a while so he and Sandi could get caught up on some education and take a break from the rigors of living in the third world. On November 11, 1983, I got a phone call from Les. They were in Oregon, Sandi's home state, and Les had up-graded to Extra. His new call is KO3G. More exciting than that, Sandi was now licensed. I had the privilege of being her first HF phone contact. Sandi's call then was N7FEL. I think she had just up-graded to Advanced and probably has a new callsign. I get this warm feeling when I think about the Kolbs.

Well, WB4CSW was worried like a mother hen until we got on the air. Gary dutifully delivered the information that we had decided that we might never get another chance to see Swaziland so we opted for another week of vacation.

Upon arrival in Johannesburg, I hunted down Julius, ZS6AF. He was easy to find and we had a nice visit there with him. We met several other ZS hams there but the only other callsign I remember was ZS6FU, who I had worked several times on the YL International SSB System.

We rented a car and prepared to leave for Swaziland. Julius cautioned, "Whatever you do, be at the border BEFORE 10 p.m.!" I wondered aloud if we should leave right away. No, we had plenty of time, but just be there BEFORE 10.

Martha and I left Johannesburg driving conservatively. I was somewhat dubious about this driving on the wrong side of the road. As you might suspect, I took a wrong turn or rather did not turn when I should have and we drove a considerable distance out into South Africa's beautiful farm land before we finally started asking directions. The problem is that farmers are pretty much the same the world over. They go to bed early and they don't do a lot of traveling. We lost quite some time before finally getting directions back toward the border. I drove like a man possessed by the devil.

The little tiny subcompact car was nearly out of petrol when we screeched to a stop at the Swazi border at exactly 10:04 p.m. The border was closed. Mbabane lay just about 10 km across the border but the last tiny village we had passed through was some distance back and we had seen no hotel. It is difficult for two people (and one of them 6'3") to sleep in a cold, cold, tiny car with two suitcases, an antenna box, two Kenwood TS-820Ss and a broken Dentron amplifier!

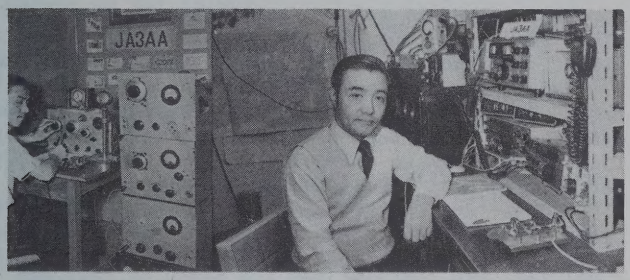
The next morning, when the border reopened, we

drove into Swaziland and established another Ham radio friendship with John Brick, 3D6BK and Billi Menz. Martha and I cherish these two people like our own flesh and blood. Fortunately, we are able to have more contact with Brick (NT6M) and Billi than many of the friends we have made on the air and in person. Brick and Billi live in Northern California after Brick was supposed to have retired. We just got a post card from Central America. Brick can't sit still for long!

As you might have guessed, the theme of this column written right before Christmas is the gift of friendship. It is the one gift that I know of which lasts and lasts, needs no batteries and returns and returns and returns. The fraternal nature of our hobby is unique in that it is one avocation that requires you to like people.

Look around and don't let the most precious part of DXing and Ham Radio go by simply because you are chasing numbers. You can do both and be richer for having done them both.

Happy Holidays de WB4ZNH and WN4FVU.



Celebrating 30 years in amateur radio

1952 — JA3AA — 1982

Isaji Shima

JCC #2526

7-4-8, Furuichi, Habikino City, Osaka 583 Japan

On August 27, 1952 five amateur radio stations became the first to be licensed in Japan following the end of World War II. They were JA1AB, JA1AF, JA1AH, JA1AJ and JA3AA.

The first equipment at JA3AA was a transmitter consisting of 6AG7, 6L6, 807, 813 lineup. The frequencies were 7, 14, 21 and 28 MHz, with 200W output power for A1 and 50W for A3. His receiver was was a plug-in type coils with one RF and three IF stages. The antenna was a 40m long inverted L. All the equipment was home brewed.

Isaji's first QSO was with DU1CE on 20 m CW. He was so nervous that the QSO was over before he realized what was happening. He received the first Japanes license for a portable station in 1955 and for 1.8 MHz in 1964.

Thanks to cooperation and friendship of many hams, Isaji enjoyed his amateur radio life for over 30 years, and he was able to participate in special events such as JA3XPO at EXPO '70. He sends his greetings and thanks to all and wishes all a fulfilling ham life.

IF
YOU RECEIVED
RADIOSPORTING
AND ARE NOT
A SUBSCRIBER
IT WAS NO ACCIDENT!
PLEASE CONSIDER IT AN INVITATION TO JOIN

STATE OF THE ART STRIKES BACK

Pete Nissen, W4PTT

You will never believe the true story I am about to pass along. We purchased a Butternut Vertical Model HF2V, for the "All Band CW" station at Field Day. I thought that I might just as well set it up, tune it, and see that it works so that it will be ready for Field Day.

I drilled a 3" hole in the concrete walk outside by my shack near the swimming pool. I jetted a 2" steel pipe into the ground and mounted the vertical inside the pipe at ground level. I did NOT install any radials - assuming that the pool, plus the pipe "jetted" down to the water table, would provide an adequate ground system. I tuned the antenna according to the instructions and obtained an outstanding SWR. As a matter of fact there was 150 kHz of the 75 Meter band that was a FLAT 1:1. The highest on 80 Meters was 2.6:1 and on 40 Meters it ranged from 1.2:1 to 1.8:1. By the time I was finished it was getting late and we had to go out to dinner.

About Midnight I fired up the TS-820 and the amplifier on 75 meter phone and began working all over the country. I stayed on the air a couple of hours even though I was coming in on my intercom system with about a 30 over 9 signal. The control and amplifier for the intercom is less than 6 feet form the antenna. I unplugged the intercom so I wouldn't keep everyone in the house awake.

The next morning I had a sked with Bernie, N4GBY up in the hills of North Carolina and we talked for about 2 hours. That evening Bernie was going to work the Mikes' NF4L, N4EPD, and N4GIH, on 75 Meters at 9 p.m. I fired the rig up on 75 and no sooner checked in with Bernie and my doorbell rang. It was my next door neighbor. He was laughing and said that I had once told him that "Anytime I come in on his TV or anything to let me know." He told me of his tale of woe.

He is a guard for Wells Fargo and goes to work early in the morning so he is usually asleep by 10 p.m. Sunday night, about midnight, he was awakened by the lights coming on and going off in his house. At first he thought it was a burglar so he grabbed his revolver and "checked out" the house. Not a sign of anyone. The lights kept going on and off at random. His father-in-law is an invalid and is unable to flip regular light switches so he replaced all of the switches in the house with the capacitance type that you merely touch. He couldn't understand why they kept going on and off. He finally had to unscrew all the light bulbs so he could get to sleep. It baffled him all the next day. He didn't even think about the ham next door, since I have never caused TVI before. That Monday evening I decided to work Bernie on 75 meters as my neighbor was watching TV. I was most definitely destroying his TV picture and the lights started going on and off again. Then he knew what was causing the problem since he could hear the audio and even recognized my voice. The strong RF field from the vertical at ground level overloaded everything around. (By the way, the movie he was watching on TV was "Halloween"). Some days you just can't win. The vertical would probably work great out in the open and with radials but close to a house with capacitance light switches - forget it. This modern living is for the birds. I think sometimes this "State of the Art" business just goes too far. (W4PTT)

DXPEDITION TO LACCADIVE ISLANDS

Franz Langner, DJ9ZB

The Laccadives, a group of islands located in the Arabian Sea about 250 miles East of India 10 degrees 34'N latitude and 72 degrees 37'E longitude, has been a protected place by the Indian Government due to its strategic location. Till recently, no outsiders were allowed to visit the islands.

The islands mainly consist of coral reefs. The first visitors to the islands, many centuries back, happened to see so many islands grouped together that they thought there must be more than 1 lakh islands (1 lakh = 100 thousand in India), and the name Lakshadweep might have been coined after the 1 lakh islands. The Laccadive Islands were not active on the amateur map for the past 12 years and as such there was a great demand for a contact with the islands from all over the world. Many applications had been put up to the government of India which had not been considered until the late 1983. Due to the persistent efforts of certain Hams in India such as VU2RX, VU2MYI, etc., the government finally allowed operations on these islands, since 1983 was declared as the world communication year.

Although I had made my first application many years ago, I was only successful in getting it on December 1983 with validity of the permission until the 30th of December 1983. When a representation was made to the government that the time gap was very short, the permit was extended and we were allowed to operate on the island for 15 days in January 1984.

The decision to visit the islands was made at the beginning of December 1983 and immediately the Coimbatore Hams such as VU2DVP, VU2CVP, VU2APE, VU2WY and VU2GO were consulted. At that time we decided that it is better to have at least 2 or 3 more operators. We knew that VU2DQP and VU2TS were very interested in the DXpedition and as such contacts were made with them and they immediately agreed to join the group.

A preliminary meeting was held in Coimbatore, in the third week of December 1983, after which we met everyday to make plans as to the equipment and other items required for the trip.

In the meantime, a daily contact was also maintained with James, VU2ARL, in Laccadives. Actually, James gave us continuous information as to facilities available on the island. Over the radio he described the island in such detail that we were able to make a rough outline map of the island. He informed us that electricity was available but it was not good enough to operate the transmitters as the voltage dropped at times to 160 volts. If it was not for his forewarning, we would not have taken the generators and batteries which were most essential for the success of the operation. Whatever success we achieved was due to the first operators such as James, Suri and their group. A great part of the success of the expedition is also due to the advice and hints given by VU2CK in Delhi. We had long discussions on the air and he gave us innumerable points with regard to band propagation, details of split frequency operations, etc. He even advised regarding the cameras to be taken and insisted we also take a video of the operation.

Knowing the location of the island and the environment, decisions were made regarding the type of towers, antennas, etc., to be put up. It was decided that the two TH3 antennas installed in DVP's and APE's shacks would be brought down and packed. A TH6 antenna was also arranged to be taken. Two masts about 40 feet high were also found to be essential. Surplus aluminum pipes were located and plates and clamps were made so that they might be used as poles for dipole antennas and wire beams.

Also, as we understood understood from James that no proper hotels existed, so the necessary cooking utensils and provisions had to be taken. The YLs were given the responsibility to organize this, which was very ably done by VU2CVP and VU2GO.

James also told us that the island had one main road on which the main mode of transport were two-wheelers. So we took a moped along with us. Many other Hams such as W2NQ\7, W6CCP, W8MPW, 9V1JY, etc., gave us a lot of advice and hints.

VU2APE and VU2DQP were sent to Cochin by car to make arrangements on the ship for us and the heavy luggage. It was decided that the group will travel as deck passengers if cabins were not available.

By the 1st of January 1983, the packing work earnestly started. VU2WY who is a technical expert, started testing each and every piece of equipment and antennas, with the assistance of Ramesh, VU2NRS. The equipment was operated for at least one day before it was finally packed. All spares, such as tubes, antennas, and capacitors, were packed along with the equipment. We had to work more or less on a 24-hour basis along with assistants. Till the last minute, VU2WY had to set right any small problems which always seemed to crop up. The KWM2 for instance, broke down 2 days before departure and after a long time, it was found that the relay contact was dirty. With a lot of patience, VU2WY solved the problems one by one The list of spares to be taken increased.

On the 4th of January 1984, the whole team gathered in Coimbatore. That evening the truck with about 52 boxes, towers, etc., left for Cochin.

In Cochin, VU2DQP and VU2APE had to run all around the port organizing the porters, etc., for the final departure. VU2DVP also joined them by the 5th evening and they must have had a sleepless night due to the tension as to whether the loading would be done or not. The luggage was considerable and in the last minute, there was a slight hitch as to the loading of the towers. Anyhow, VU2DVP and his friend organized this in such a manner that a small ferry boat would carry the luggage on the 6th morning and go to the other side of the ship to load the goods separately. We all sighed with relief when around 4 p.m. we found the towers on the top deck.

The Cochin Hams such as VU2TH (Hari), VU2ARL (James), and VU2NNN (Nazir), came to the port and gave a supporting hand to us. Bharati and Suri had returned the previous day on the same ship by which we left and they also joined the Cochin team and

send us off. They gave us invaluable suggestions. We were also extremely lucky to have a radio officer Rajan, VU2RJN, on the ship.

With true Ham spirit, Rajan gave us a helping hand right from the beginning, including help in loading and unloading baggage. At last the ship left at 6 p.m. and we had to travel for more than 36 hours to reach the main island called Kavaratti on the 8th morning. The sea was quite rough and it took a lot of physical effort to unload all the baggage which had to be transhipped to the ferry boat as the main ship anchored approximately 1 mile away from the island.

We had many anxious moments when we found that all the baggage had left except the towers as there was nobody available to unload them. VU2DQP and myself, with the help of Radio Officer Rajan, had a real hard time unloading the tower on to the barge in the last minute. Even the Captain had to give us a helping hand.

In the end, both of us were stranded on the ship which was already late. The Radio Officer came to our rescue by requesting a small ferry boat to meet us midway to the island.

As we reached the jetty, we found the mobile antenna on the moped and VU2WY with his own ingenuity had used the moped as the base for mobile antenna and with batteries, they made contacts with Coimbatore using the TS-130 informing them of our safe arrival.

The coral islands are covered with very fine sand and for transport of goods, the only mode is to use tractors or tillers. Even the power tiller, due to heavy load, had to be pushed on the sand. By the time we moved all our luggage and settled down in the huts in the evening, all the group members were really exhausted.

After some rest we started assembling the TH3 antenna while the mobile antenna was fixed on to the wire fence around the hut which acted as a very good ground.

In the early morning of the 9th, the band was extremely silent. The sun was just rising. Around 01 GMT we started hearing small whispers on the 20 meter band. Gradually, we heard call signs. One of the first stations heard was W2NQ, John, who was already looking out for us. This was the first 'W' station we worked. The next station was KB7SO (Ron), and then the pileup started.

In the meantime, VU2WY was busy setting up the other stations and arrangements were made to put up the second TH3 in a different hut about 1 km away from the 1st location. It was also decided that VU2DVP, VU2CVP, and VU2TS would operate from this location. On the 9th evening WY again organized setting up of the TH6 along with the tower. This was raised up with the help of the local people and by 6 p.m. we had the TH6 also operational.

The long path to the East Coast started opening up around 12 GMT, and the first station to be worked was WA4MMO after which the pileup started. VU2GO took up the operation of the station while the men started getting busy putting up the dipoles. A 40 meter setup also became operational with the mobile antenna. By the 10th evening, the 80 meter wire beams, 40 meter wire beams, etc., were set up. On the 11th we had a 18 AVQ set up. On the 10th we had more or less 5 stations in operation depending on the band conditions.

Every morning W6CCP was the first station to be heard and was more or less like a beacon to us. In the evenings when we heard W8MPW (A1), or W4AMJ, we knew the band was opening up to the East Coast. A1 constantly kept us informed on the propagation conditions based on his information.

VU2TS (Ganesh), being the main CW operator and the one who made the highest number of contacts in the group, kept up to his reputation as one of the best CW operators in VU2.

Japanese pileups were most pleasant to handle as they were extremely disciplined.

The West Coast was also much easier to work due to the fact that the openings always started in W7 and as W7 faded away, the W6 came and later on the South Americans.

The East Coast was a big problem as the opening was very much broader and all the call areas called at the same time. The 15 meter openings were extremely good and easy to operate again due to openings being the specific areas in the East Coast.

We are certain we could have made many more contacts but due to this DX-pedition being our first experience, we did make many mistakes.

In the early mornings, the 40 and 80 meter bands started fading out while the 20 meter band opened up. Around this time there were 3 or 4 operators working on the different bands. As the 20 meter band really opened up, 40 and 80 meters went dead.

Having the YL operators on the band did help a lot in bringing in some discipline on the bands.

Although the operators enjoyed operating, they needed extreme patience and after a few days, it was a real physical effort to stay on the bands at least for 18 hours a day.

Around 10 a.m. in the morning, the 10 meter and 15 meter bands opened up in the East. Around 11 a.m., the Europeans started coming in and these 2 bands alone were active until around 11 p.m. in the evening. The 20 meter band opened up around 3 p.m. to Australia and the East Coast. Sometimes the 20 meters stayed open throughout the night and till the early mornings.

The 40 meters normally opened up around sunset time which was around 6 PM. Contacts were made with the East until around 11 p.m. in the night, at which time Europe started coming in. Normally, around 6 p.m. there was a very short opening for about 154 minutes into the West Coast but the commercial QRM was very high. We did hear a lot of American stations very well, but the Europeans never gave us a chance to work them. Only in the morning hours as the band conditions changed, we had a short opening into the East Coast.

The first 4 days was a disaster as far as the 80 meter band was concerned. As mentioned earlier, all the equipment and items were tested except for a new roll of coax cable. This was used for the 80 meter wire beam, but although we heard many stations, no one heard us. It was ultimately on the 4th day we found the losses in the coax cable were very high, no signals went out. As a result, we lost at least an extra 1000 contacts on 80 meters.

The original plan was to stay on the island for about ten days, but due to the various requests, we decided to extend our stay to about two weeks. VU2CVP and VU2APE had to return to Coimbatore because of other commitments. The remaining operators VU2GO, VU2TS, VU2DQP and myself, decided to remain behind.

Finally, the group ended up by making approximately 25,260 contacts as follows:

80	meters	1,380	QSOs	15	meters	7,260	QSOs
40	"	2,620	"	10	"	1,320	"
20	"	12,680	"	TOTAL		25,260	

Out of that there were 7,780 W's and 4,960 JA's.

You will notice that out of the above contacts, 50% of the contacts were made with only 2 countries, i.e. W and JA.

When we went through the logs we found the first Japan and USA stations to be contacted was as follows:

Japan	USA
20 M JR7COO	80 M K1MM
40 M JA1HGY	20 M W2NQ
10 M JA6HCA	10 M KB7SO
	15 M W8MPW

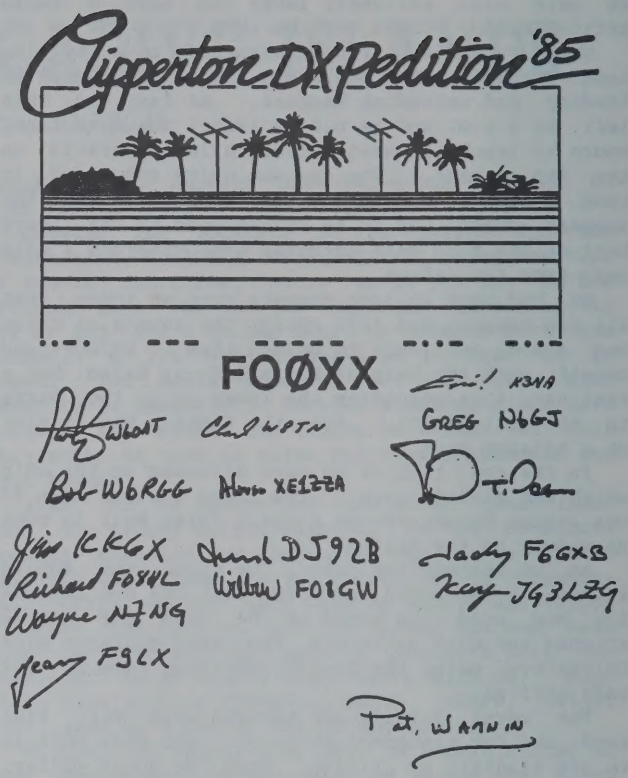
We were in for a big surprise when we started making acquaintance with the islanders who are all Muslims.

Although we had been to many parts of the world, we never imagined that such a paradise ever existed. The islanders were one of the most unsuspecting and a friendly lot. There are no locksmiths on the island or shops selling locks, as a result nothing is ever locked. Theft in unknown. There are about 80,000 coconut trees on the island, which is their main crop. You can never buy a coconut but you only have to ask for it and get it free. Similarly, in the case of fish. Most households do not have maids or servants or any type of helpers. Should you require help, there will be more than enough people around you to give you any sort of assistance. When we recall the two week stay on the island, it now seems just like a **dream.** **(DJ9ZB)**

Here is Franz, DJ9ZB, operating his station in the 1984 CQ WW DX contest. Wonder how many station recognize that "regular" call sign, when he is operating from home and give him a point or multiplier in the contest, saying: "Thank you for the new one you gave me!" Franz is one of the foremost European DXers and contesters. He is very active and taking part in many DXpeditions, he is QSL manager for many stations, he writes the DX column for the German DX publication BEAM and last but not least our contributor and enthusiastic suporter of IRSA and RADIOSPORTING. *We are proud and honored to have Franz aboard and are looking forward to his many stories about the operations from all those far away places.*

Franz has visited His Majesty King Husein, JY1 and just recently received the telegram from JY1, thanking him for the best wishes for his 50th birthday.

We are all looking forward to work Franz from another new and rare one. Maybe West Berlin? That should be the easiest one for him!



Anyone collecting autographs? Here is a colection that could have been obtained only on Clipperton Island. It contains signatures and callsigns of all those operators of FOOXX. Those who managed to work this rare island are being rewarded with this good looking QSL card.

450 MHz REPEATERS IN JORDAN

Jordan *(via RJRAS) - This nation has entered the era of 450 MHz amateur repeaters. His Majesty King Alhussein Ibn Talal, JY1, inaugurated operation of the UHF system in mid September.*

The new repeater is located atop the tallest building in Amman, and uses a Spectrum transmitter and receiver capable of 15 watts output and a 9dB gain custom designed omni-directional vertical antenna.

Ten JY stations have already made use of the new repeater with most initially heard during its first weeks of operation. *(Westlink Report)*

THE THRILL OF 160

Carl Huether, KM1H

After spending all last winter listening to the 160 meter DX announcements on the Southern New England DX Association repeater, I finally decided to give the band a try.

A new set of crystals for the Drake C line solved the first problem. My 100 foot tower was already supporting stacked homebrew 4 element yagis, plus delta loops for 80 and 40, plus three slopers for 75... I did not dare add another antenna for fear everything would stop working.

Mike, W1JZ, suggested shunt feeding the tower since I was already using non-metallic Phillystran guys. That is one suggestion I will never regret. Starting in mid-April, 54 countries were worked through the summer static with the Drake's 100 watts output. This was fun, but the low power and poor reception were getting frustrating.

In September, the old (1964) National NCL 2000 was modified to include 160. A 750 foot South Beverage plus a 750 foot reversible East/West Beverage helped reception. I live on a suburban 1 acre lot, so a considerable amount of neighborhood cooperation was required. A few weeks later a 1200 foot NE Beverage opened up a whole new world. This was installed way out in the woods behind the residential area with about 1000 foot of CATV RG6 feedline. It is not reversible... yet. the final Beverage, installed early November, is a unterminated 1500 footer running NW/SE.

The local DX gang felt that this was a lot of wire and effort just to work KL7 and ZD9! Well, a few days later KL7GKY was worked but no ZD9 yet. The end to this saga came during the CQ WW CW contest. As dawn was approaching on November 24 the contacts were getting scarce, so I tuned down to the low end of 160 looking for VK/ZL multipliers. All I heard were W3, W4, etc., calling and working JA's.

Tuning up to the JA window a few very, very weak signals were heard. But, wait a second, that is on the West Beverage. Switching over to that useless NW Beverage, the signals not only came out of the noise, they were LOUD! A few minutes flipping back and forth established the pattern that most of the contacts were initiated by US stations calling CQ.

What the heck, why not give it a try? On the third CQ QSX 11, I thought I heard my call. QRZ? Oh my God, there is a JA calling me, but there are now two other JA's in there working the US.

QRZ JA3???... PLS AGN/KM1H de JA3BCT.....bk/JA3BST ur 5NNO5 5NNO5 5NNO5 de KM1H bk/KM1H ASL ur 5NN25 5NN25 5NN25 de JA3BCT/RRRR QSL QSL TU TU de KM1H.

It's over, reality is starting to set in. Did I really work a JA on 160 or was I being snookered as have others in New England? The proof is a QSL, but I still had serious doubts, so only a few close friends were told that "I think I may have worked a JA."

"Sure, Carl, but isn't it a little early to be hitting the Michelob?" Snickers.

Well, the proof arrived on December 21, along with a Christmas card and a photograph of his shack. Thanks Yoshi, history was made that day. Checking with many of the 160 DX gang elicits the following claims:

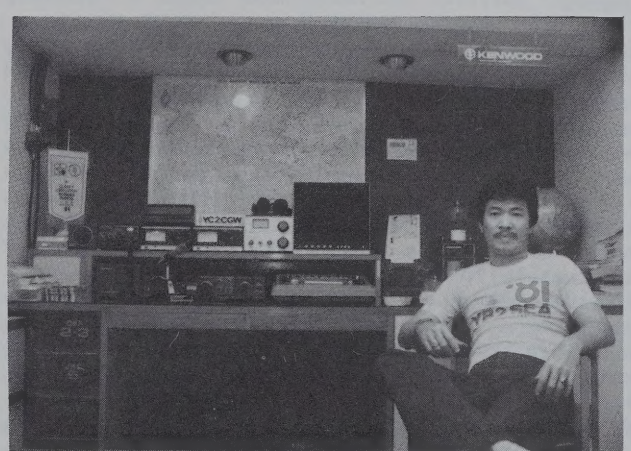
- Second ever New England to Japan on 160.
- First ever with legal power. In fact at 600-650 watts output, about 4 dB below the legal limit.
- First New Hampshire to Japan on 160.

In retrospect, I would have done two things differently. First would have been to try and work another JA while the window was open, instead of sitting in a daze. Secondly I would have been to exchange real signal reports, not a 5NN contest exchange. Yoshi, you peaked an honest 469/479.

To all you other One Landers: Keep at it. A Beverage is mandatory, 5KW is not. Verticals DO work. Who will be next? First SSB?

To ALL 160 DXers: Keep those calls short. The practice of signing 5 to 10 times is asinine. What is this Gentleman's band myth I keep hearing? What is with the double K at the end of a call? In the days of 807's and HRO's it had its place. Today, with all the varied callsigns, it is more confusing to the DX station. I would sure hate to have been in JA3BCT's log as KM1HK. See November 1985 QST, page 74, W6ISQ comment and page 78, W7TC comment.

The DX count today, Christmas eve, is 111 worked and 57 confirmed. A new tower has been erected and an inverted V at 130' helps on "Horizontal Nights." Phasing the two towers is an interesting possibility. Parts accumulation for a 1500 watt amplifier are under way. I'm addicted to 160.(KM1H)



Wawan, YC2CGW has this neat sut-up of Kenwood radios. He likes 160 meters and is using keyboard for CW sending. (LZ2CJ)

CHIRPS

Had you heard that the rails of the Canadian National railways are 3 miles longer in the summer than in the winter because the expansion of the steel rails in the hot weather makes each mile of rail 40 inches longer in the summer?

CONGRATS are in order to Ray Hunter VE3UR who achieved first place for multi-operator in the 1985 Eighth Annual VK/ZL Oceania World wide RTTY DX Contest with 514,688 points. Ray is a great contester, and an avid RTTYer with the best equipped RTTY station in his area. You name it...Ray has it. (CARTG)

160 m WEIRD WIRE ANTENNA

Yuri Blanarovich, VE3BMV

The old problem of not having enough space for the low band antennas is an acute one for most hams. What is good for transmit is not always good for receive on 80 and 160 meter bands . On transmit we want the RF to go at the best possible angle depending on propagation at that particular time. Quite often we see drastic changes in the mode of propagation or angle of the signal arrival. Verticals are most effective transmit antennas for the DX work. Even shortened verticals with decent ground systems can do miracles.

On receive we want to extract the maximum signal with the minimum noise. Here the directive properties of the antenna are very important. The more directive or focused the antenna is, the better the rejection of unwanted local electrical or atmospheric noise it has. The Beverage and other close to ground antennas give an excellent results. Many hams do not have the sufficient space to put up a long beverage, but there is hope. On receive, many metallic objects such as electrical wiring, water pipes, fences, modern metal frame buildings etc. provide the environment where the signals can be concentrated or focused. If we manage to find such a focus and place a suitable "coupler" there, we could obtain surprising results. This of course would depend entirely on the local situation. Also, some experimentation would definitely pay off.

In my experience, I have come across a similar case by "accident" (like most other inventions are born?).

I live next to a public park. There is about 1000 feet of room for the Northeast beverage. (I am one of the "public" so I can use the park right?) When I go for "walk" in the park I pull a wire behind me instead of walking a dog. The park happens to have some trees so, in order to get the wire away from the other "publics" walking through the park, I thread the wire through the trees about 10 feet off the ground. To make this a snappy operation, I have a spool with a crank. When I want to install the wire I just grab the end and pull the wire behind me. I use the visegrip pliers as a quick connect/disconnect weight to throw the end of the wire through the trees. A piece of string is used as an end insulator and is tied to the last tree. The wire is then tightened and voila, Mister Beverage is at work.

This is usually done just before the contest, otherwise the wire is rolled onto the spool and left in the backyard. One evening I turned the transceiver on and was listening on 160 m, suddenly a strong G3 was coming through. The band must have been in super shape if I was able to hear him so early. Time to unroll the NE Beverage. So I ran outside, grab the end of the wire and stretch it through the trees. When I got inside and checked to see how much louder the G3 was, I could not hear him! I still heard other stations working him, but there was hardly any trace of that G3! He was about S4 before.

Is it possible that the Beverage is not as good as when the wire is rolled up on the spool? Only one way to find out: wind the wire back onto the spool and see what happens.

There I went winding the Beverage "back home" putting the spool back exactly as it was before. When I checked the radio, I couldn't believe it! The G3 was back with a S4-5 signal! Wow! What was going on? The only thing I could attribute this to was the way the wire was routed in the backyard. Somehow, coupled to the things around it, it managed to pick-up more signal than the Beverage!

To describe the layout it was as follows: the wire ran from the shack window in the basement to the top of the 3 foot wooden fence about 30 feet away. This was going in about 330 degree "heading." The wire then made a 90 degree turn right (60 degree direction) for about 25 feet to the corner of the fence, laying on the top of it. It made another 90 degree turn south (150 degree) and continued on the top of the fence to its end for about 60 feet. The wire was then turned back, allowed to drop onto the ground and routed back by the same fence for about 40 feet. There was the spool with the rest of the wire from this 800 foot Beverage, sitting on the ground. To be precise, there was another Beverage, underneath this one on the spool, not connected to anything, just ready to unroll, when the first one was out. My tower is standing in the middle of the 30 x 46' backyard.

Later we replaced our rotten wooden fence with a nice chainlink mesh type, now the "Rolled Beverage" doesn't work anymore.

Afterwards, when I visited Stew, W1BB, I saw something similar around his house. He ran the wire in an "unscientific" manner around his house on the top of his and the neighbor's fences. Stew said that it took him a while to find the best configuration, but it paid off. He was hearing well on it.

What it all means is that 160 and 80 m bands are quite different from the reception point of view. Don't be afraid to fool around with the weird receiving antennas. You might be surprised. Just look around and see what is available. During the winter season, especially where there is a snow on the ground, you can "plant" some wires on the ground and let them be covered by the snow. They will work for you, unseen by other mortals.

Because the wires supply low signal levels, it is important to match the impedance of your wire to the radio's input impedance for the maximum signal transfer. (Yes, the low SWR or good much is important!) I have built receiving antenna matching unit which can actually take about 200 W power on transmit. Using the SWR bridge and transmitting to that unknown antenna I can quickly match it to the transceiver, mark the settings and then use it on receive. Also a noise bridge may be used to match the antenna to the receiver. When using seperate antennas for receive, it is a good practice to wire a small pilot lamp in series with the receiving antenna, or use the relay to short the receiver input during the transmit. It saves the receiver front end from a disaster.

A good 20 to 30 dB gain pre-amplifier sure helps to extract those weak ones and compensates for poor antenna efficiency.

This sure does miracles especially in the city environment and will help you to hear many stations that otherwise will be drowned out in the city noise. One can now easily work 100 countries within a year on 160 meters. Go for it! (VE3BMV)

LOW FREQUENCY GROUND WAVE ANTENNAS

Ken "Judge" Glanzer, K7GCO

There are two forms of "ground wave":

1) over the ground
2) through the ground.

Described here are some novel techniques for the low frequency antennas that are very effective and which have been overlooked for many years.

The basic idea of this article started forty years ago, when I used the 110 V AC power line as my antenna for the BC band. There have been TV antennas that plugged into the 110 V AC line, and the inexpensive FM radios used the 110 V AC line as the antenna by connecting it with a small capacitor and it did a god job. I used a 600 uufd receiving variable (which is hard to find now) in series with either lead of the 110 V AC line connected to the "A" terminal of the BC receiver, as illustrated in Fig. 1.

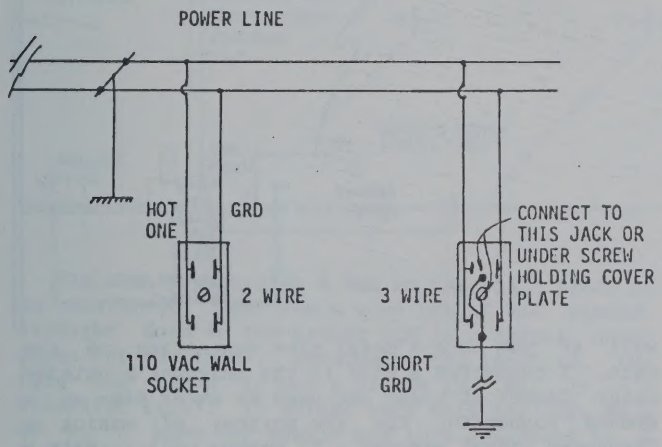
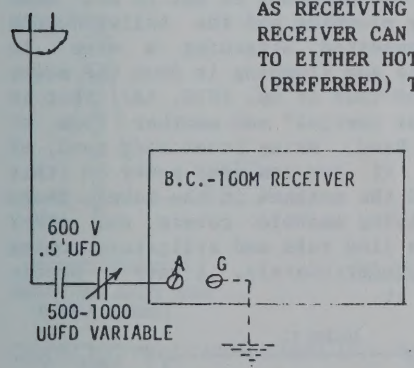


Fig. 1 USING THE 110 V AC LINE AS RECEIVING ANTENNA ON 160 M. RECEIVER CAN BE CONNECTED TO TO EITHER HOT OR GROUND WIRE (PREFERRED) THROUGH HV CAP.



I'd tune the variable, the BC station would peak, and it made the best BC antenna you can imagine. I used to listen to two classical music stations, KCRL in Reno and KKHI in San Francisco. Then the stations moved within 10 kHz of KKHI and I needed selectivity. Tuning the capacitor helped but it wasn't enough. My friend, Dick Thomas, W7IKY, gave me one of the BC toroids wound with litz wire, which I connected (as shown in Fig. 2). This, tuned with a high Q, gave an exceptional selectivity and gain. Also, he built me a regenerative preamp, that had even more adjustable gain and selectivity; it

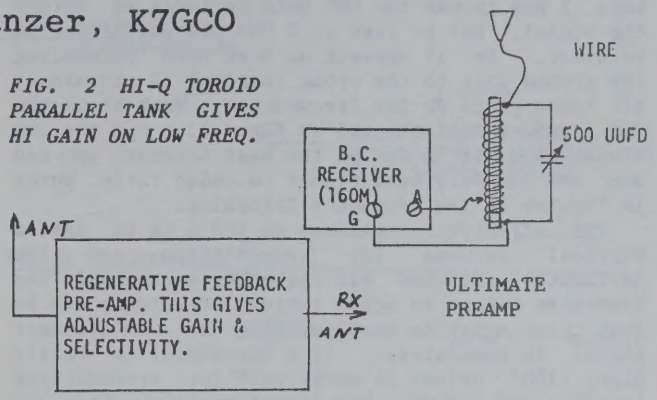


FIG. 2 HI-Q TOROID PARALLEL TANK GIVES HI GAIN ON LOW FREQ.

was so sharp that it could distort the audio. Incredible!

It occurred to me that if this all worked so well on the BC band, it would also work on 160 m. However, you have to realize that the 160 m stations aren't transmitting with the same power or big antennas as are the BC stations.

I thought that transmitting on the 110 V AC line had some "possibilities," perhaps with low power. However, any RF on the line was sure to cause BCI and TVI and a hot chassis on the transmitter. Whenever I'd had the antennas too close to the power line, I got BCI and TVI by mutual coupling, therefore a direct connection was inviting trouble.

In the AM days, my neighbor told me of a time, while eating dinner in the kitchen, he heard what sounded like my voice coming from the open oven door. He had had a few drinks before dinner and didn't want to say anything to his wife, but she was also looking at the oven strangely. The RF coupling to the 110 V line from the close antenna was rectifying in the heating element. I tried to explain to him that I was SSB (Single Side Burner), but he didn't understand.

Now since either of the 110 V wires tuned with a variable in series works equally well, the grounded wire is a safe one to use in case of a ground return in the receiver antenna circuit. I use a .5 ufd fixed in series with the variable, in case the variable shorts out and I'm connected to the hot wire. I use a neon lamp to find the hot wire, and then connect to the other wire which is grounded. On the three wire receptacles the odd or third wire is grounded (but a shorter lead frequently) or connected to the screw that holds the plate on the box. That is often connected to the receptacle which is grounded.

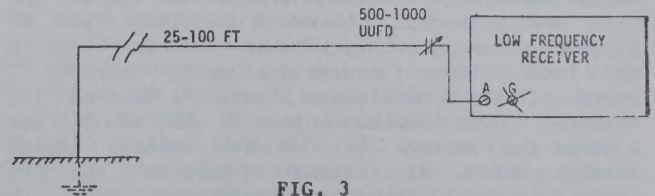


FIG. 3

CONNECT THE GROUND WIRE TO THE "A" TERMINAL - NOT THE "G" TERMINAL. VARIABLE CAPACITOR IS NEEDED TO DETUNE SIGNALS DUE TO OVERLOADING OF SOME RECEIVERS. IT GIVES EXCELLENT SIGNAL LEVEL AND OUTSTANDING SIGNAL TO NOISE RATIO. (ITS GROUNDED)

Since the 110 V AC ground wire works so well, I decided to try another wire I had attached to a good ground that was connected to the "G" terminal of the BC radio following the pictorial instructions in the manual. I connected it to the "A" terminal, and the signal strength was so strong that I had to use the 600 uufd variable to detune the signal, not to peak it, on this particular BC receiver. So it appears we have been connecting the ground wire to the wrong terminal (G terminal) all these years on low frequencies. Hook it to the "A" terminal (illustrated in Fig. 3). For the low frequencies it is one of the best antennas you can use and the very best signal to noise ratio which is the key to low frequency listening.

The effective technique on 160 m is to use a vertical antenna for transmitting and low horizontal antennas for listening because of the favorable signal to noise ratio. Verticals can be just too noisy to hear anything but a stronger signal in some areas. If a horizontal is fairly high (100' or so) it works well for transmitting locally and for DX. The signal to noise ratio is always better than with the vertical for receive. Many use a hunk of wire thrown over the bush for all practical purposes for the receive antenna. Although the received signal is low, the noise level is so much lower that you can hear signals on it that you would not hear on the vertical or sometimes even the high horizontal.

A pleasant surprise occurred once when I took the grounded 25' wire, (illustrated in Fig. 4) and with the 600 uufd variable connected it to the ICOM 720 and adjusted it for a 1.2:1 SWR.

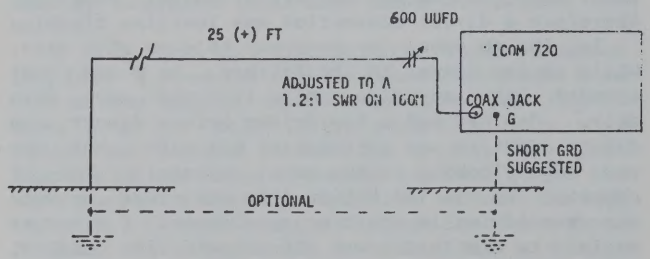


FIG. 4

SIMPLE RECEIVING AND TRANSMITTING ANTENNA FOR 160 M ALTHOUGH GROUNDED WIRE TUNED TO 1.2:1 SWR JUST WITH VARIABLE CAPACITOR, A REGULAR TUNER WILL BE NEEDED AT MOST INSTALLATIONS.

I tuned in a W6 calling CQ and gave him a call. He came back giving me a S7 and I just about fell over. When he finally asked what I was using (I thought he never would), I told him. I then said "I am working you on TRUE GROUND WAVE." (Hi, hi.) I'm not sure just how much of the RF at this frequency was getting through the ground itself, but it makes a good story, because the end of the wire was grounded. Later I used this type of grounded wire in my shack tuned to 50 Ohm with a MFJ tuner. When I compared it to my vertical I heard all kinds of signals I couldn't hear on the vertical. The ICOM has a jack so that you can use a separate antenna for receive without adding another relay. It transmitted very well for the local area and is certainly simple.

I also connected a wire to my water pipe, (illustrated in Fig. 5B, 5C) and matched it with the MFJ, and that worked about as well. Connect the wire to a point as far as possible from the point where the pipe goes into the ground. This works

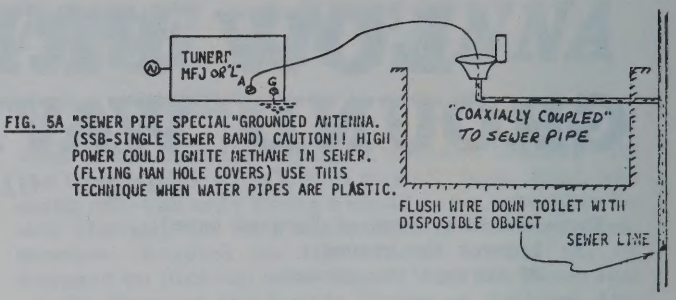


FIG. 5A "SEWER PIPE SPECIAL" GROUNDED ANTENNA. (SSB-SINGLE SEWER BAND) CAUTION!! HIGH POWER COULD IGNITE METHANE IN SEWER. (FLYING MAN HOLE COVERS) USE THIS TECHNIQUE WHEN WATER PIPES ARE PLASTIC.

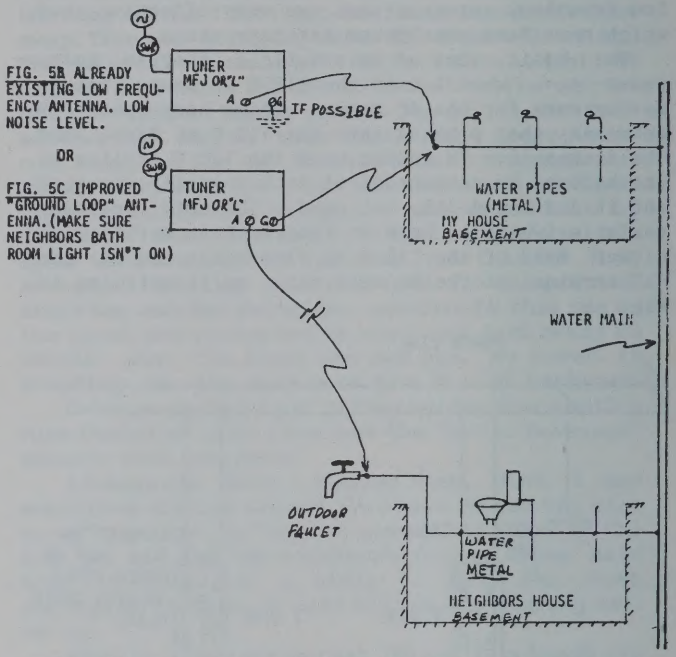


FIG. 5B ALREADY EXISTING LOW FREQUENCY ANTENNA. LOW NOISE LEVEL.

OR

FIG. 5C IMPROVED "GROUND LOOP" ANTENNA. (MAKE SURE NEIGHBORS BATH ROOM LIGHT ISN'T ON)

well if you have a metal pipe connecting to the main. I connected a wire to the neighbor's outside water faucet at night and used my water pipe as a ground connection for the purpose of making a "grounded loop" antenna. It worked well. With a high power level, the neighbor is apt to get some RF burns off the plumbing and the toilet could "bite." W7IKY suggested attaching a wire to something disposable and flushing it down the sewer for 100' or so, and tune it up. (FIG. 5A) That is a real "sewer-pipe special" and another form of SSB, Single Sewer Band, using lower side band, of course. However, if you ran some power on that wire and it ignited the methane in the sewer, there could be some flying manhole covers and other interesting results like rats and alligators coming out of the sewer. Unfortunately, I have a septic tank and can't try it.

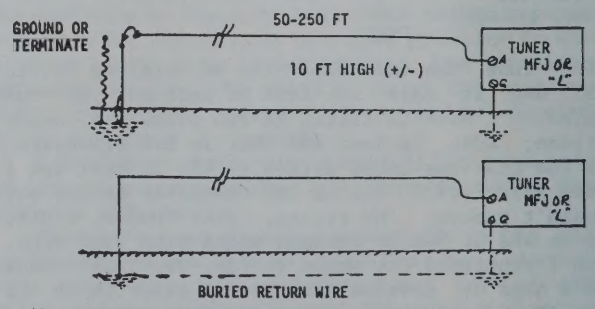


FIG. 5D THIS "SHORT BEVERAGE" RADIATES VERTICALLY POLARIZED OFF ENDS. IT'S KIND OF A SLOT ANTENNA. (SHORTED TRANSMISSION LINE WITH SPACING WIDE ENOUGH SO AS TO RADIATE.

Later I ran a 100' wire about 10' off the ground and grounded the other end. I compared it to the shorter grounded wires, and this gave a stronger received and transmitted signal. I suggest a series of at least 100 feet, longer if possible, pointed in different directions, with a network tuner on each one for fast comparisons and good bandwidth. Use a buried return grounded wire, if possible. Beverage antennas are typically terminated with resistors which drain off some static electricity and change the directional pattern. If it were grounded at the end, it might even be quieter. Also, what would help even more is grounding in the tuner (DC wise) at the transmitter end.

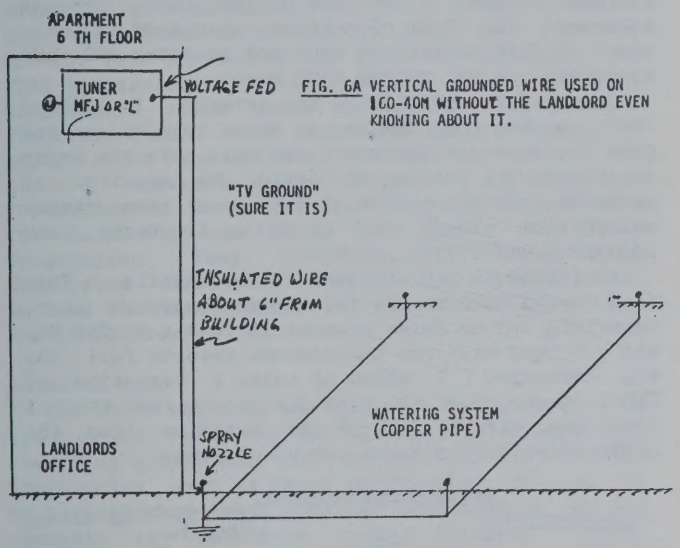


FIG. 6A VERTICAL GROUNDED WIRE USED ON 160-40M WITHOUT THE LANDLORD EVEN KNOWING ABOUT IT.

Fig. 6A illustrates a ham on the sixth floor of an apartment, who ran a wire out of his window, straight down to the ground rod (and copper water pipes for the lawn), unknown to the landlord. (He told one tenant it was a ground for his TV - a beautiful line). It worked very well for 160, 80 & 40 m. I know one mobile ham that connected to a nearby water tank for the city. (FIG. 6B)

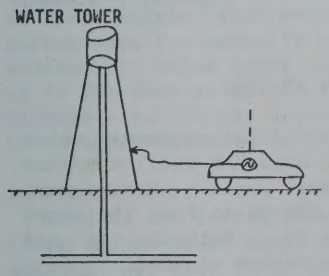


FIG. 6B BEST MOBILE ANTENNA THERE IS

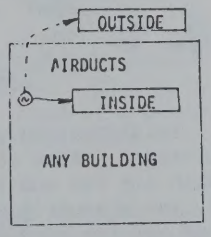


FIG. 6C USE BUILDING AIR DUCTS INSIDE OR OUTSIDE.

That has got to be one of the best grounds and grounded antennas that anyone has ever had. Another used a wire connected to some air ducts inside and outside with good results. Yet another connected to the top wire of an electric fence which was already on insulators. A clever chap wrapped plastic tape around the wire where it connected to the metal fence pole (unknown to the fence owner), and it worked as well as the electric fence wire antenna. It would probably be a good idea to do this on a wooden fence pole, also.

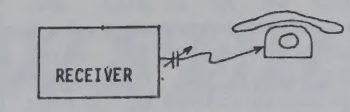


FIG. 6F CONNECT TO METAL PART OF OF PHONE-NOT LINE.

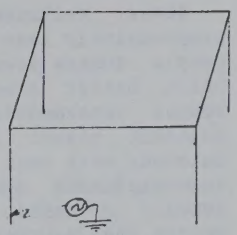


FIG. 6G CONNECT TO EVES ON HOUSE OR WIRE LOOP AROUND HOUSE. MAKE SURE EVES ARE ALL SOLDERED TOGETHER.

FIG. 6D INSULATED FENCE WIRE

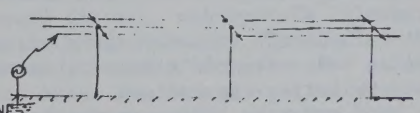


FIG. 6E UNUSED TELEPHONE WIRE

Note! There are a lot of top fence wires out there that are not being used. One connected some unused telephone pole wires with fantastic success both transmitting and receiving. Another connected to the metal parts of the telephone with exceptional results. However, if the line is shielded or buried, it will reduce its effectiveness. For an antenna like this, you can use a noise bridge with a receiver to adjust an L network tuner for 50 Ohms. One fellow used the eves and drain pipes and later bonded them all together for a better connection. Another just made a loop of wire around the edge of the house and connected it with a single wire to the shack.

Forget about resonant lengths. Just connect to anything metallic with a wire, and match it with tuner to 50 Ohms. There are so many things that can be used for an antenna on the low frequencies, that you really need a tuner on each one so you can switch between them quickly. After making comparisons of signals from different directions with the different antennas, you can develop a feel for the directivity of each antenna. I can determine pretty well the direction of many signals by switching the various antennas I have. Now with these simple antennas, you can often hear the BC and 160 m DX the big boys are hearing, perhaps with the same kind of antenna. However, they usually transmit on a big vertical. KLM has a self supporting 1/4 vertical on 160 m that is a 3/4 l on 80 m that I like. You may think these techniques are wild, but you haven't heard anything yet.

K7VIC has seven Beverages, 800' to 1100' long. They are directional, laying on the ground. He used to have them on 3' sticks but had to take them down every spring to plant wheat. He compared the ones on the ground to those on the sticks and found that the signal level was down a couple of dB, but the noise was down much more, making it a better receiving antenna. This works best on lossy ground. The point is that they work, and laying them on the ground is the ultimate in simplicity. I would think that rubber-covered wires would be best for this application. Save all your discarded coax for this, and splice it together using the shield only. I've run one wire across the edge of a neighbor's yard and he doesn't even know it.

VE7ICU has a six element wire yagi on 160--

laying on the ground. He uses a vertical for transmitting.

These techniques work on 80 m also but progressively less as the frequency increases. Link couple tuners seem to improve the signal to noise ratio better than Pie or Tee's, and both help reduce intermodulation products caused by strong adjacent signal interference. All of these antennas work best when tuned to 50 Ohm or whatever the impedance Z of the receiver input is. For SWL's, or those without a transmitter and SWR bridge, use a noise bridge and tuner and adjust for the desired Z with a null in the receiver. The MFJ tuner, which is a pie, will match anything including a wet noodle to 50 Ohm. It may require going through many of the tuning combinations, but it will give you the desired match.

Buried antennas have been used by the military and some hams. It's not as farfetched as you think.

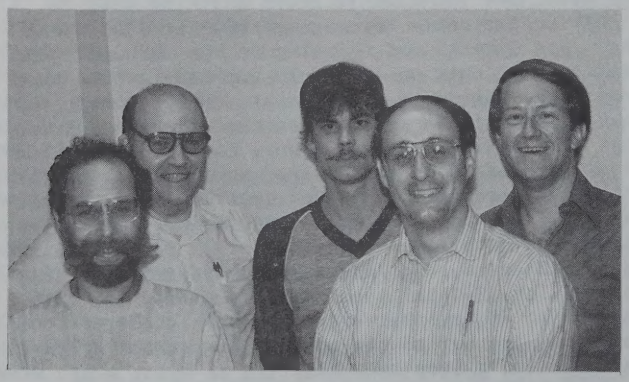
Perhaps all this will give you some ideas, like using the neighbor's fence wire on 160 & 80. The possibilities are endless.

In summary, although these antenna techniques are primarily for listening on the BC band, 160, 80 & 40 m with a good signal level or more importantly a good signal to noise ratio, some of them will work very well for transmitting. On the low frequencies connect to anything metallic of any size and match to 50 Ohms with an L network tuner for the best bandwidth. SWL's use a noise bridge and an L network tuner to obtain 50 Ohms. Forget resonate lengths as it is not necessary. With the 160 m contests coming up you will be able to hear the weak ones perhaps for the first time. Short out the ends of the feedline of every antenna you have, tune it with an L network and see how it works on 160 m. If its low to the ground and mostly horizontal it will have a good signal to noise ratio which is highly desirable. Forget about gain. Remember that "one test is worth 1000 opinions" (Old Glanzer Axiom).———————— (K7GCO)

WEST PENNA DX ASSN.

The Western Pennsylvania DX Association's officers for 1986 are: Mike Zilavy, KC3MR, President; Al Houston, N2MA, Vice President; Jan Ditzian, KX2A, Secretary; Don McDaniel, KJ3Q, Treasurer; John Getz, AD8J, Newsletter; Mike Chepponis, K3MC, Technical; Doug Stark, WA3CGE, DX Information.

The club operates a repeater on 145.37 MHz, located in Pittsburgh, PA and coverage extends into Ohio and West Virginia. Membership information can be obtained from N2MA.



Rear L to R: KJ3Q, KC3MR, WA3CGE; Front: KX2A, AD8J

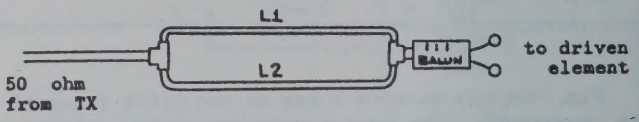
IMPROVED FEEDING FOR KLM 40m BEAMS

Dennis Younker, NE6I

The winter of 83/84 presented me with the opportunity to purchase my first 40 m beam, something that only a few years ago was but a dream. Initially, there was no doubt that it would be a two element beam. But at the prodding of a local DXer, I began to consider a three element or even a four element version. At the time, only KLM had anything larger than two elements available - the only decision left was how many elements. The local DXer decided on four elements, but after careful review, I decided on the three element antenna. The four element was specified at only about 0.7 dB additional gain and an extra 100 kHz bandwidth but for nearly $200 more!

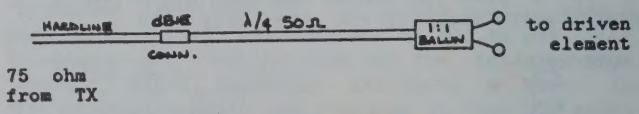
Just after purchasing the antenna, I learned that another feed system was being used by a few guys to increase bandwidth and eliminate the gamma match with its problem of blowing the capacitor if operated above 2:1 VSWR at high power (the rarest multipliers always end up on a frequency your antenna doesn't like, right?)

A letter to KLM resulted in the details. This feed works well on the two element antennas also. Bandwidth on my three element increased to 250 Khz and a friend with the two element reports full 300 kHz coverage. I wound up using a variation of KLM's recommended new feed due to the fact that I feed the antenna with 75 ohm hardline from the cable television company (obtained free).



NEW KLM FEED DESIGN

L1 and L2 are quarter wave sections of 75 ohm, 50 ohm or a combination of 75 and 50 ohm to match load impedances of 27, 12.5 or 18 ohm.



FEED SYSTEM AT NE6I

Both systems replaced the existing gamma match systems, which as far as I know KLM still supplies with its two and three element yagis. By the way, I run a short piece of 75 ohm RG-11 from the shack end of the hardline to the TX. Both the rig and AMPLIFIER match nicely - no tuners at NE6I!

(SCCCORE NEWSLETTER AND NCJ)

DRAKE TR-7 PARTS

Tony, K3UKW has acquired the remainder of inventory from R.L.Drake company. He has the following TR7 items for sale (all new):

NB-7 Noise Blankers ($65)
FL250, FL300, FL500, FL1000, FL4000, FL6000 Filters ($65 each)
All postpaid with receipt of money order.
Tony Musero, K3UKW
1609 South Iseminger Str.
Philadelphia, PA 19148 Tel. (215) 271-8898

UNOFFICIAL HAM BANDS:

THE LOWFERS

Chuck Clark, K4ZN

Back in the 1930's the FCC made provision for unlicensed operation of low-powered transmitters that became available for remote control of radio receivers and other devices such as garage doors openers and wireless record players. No license was required as long as the device did not interfere with radio communication and had a field strength not over fifteen microvolts per meter at a distance of 157 feet divided by the frequency in megahertz. This permission is still in effect. More recently additional rules permit operation in specific frequency bands, with standards that are easier to apply power and antenna limitations instead of field strength restrictions. Electronics experimenters have taken advantage of these rules to establish unofficial ham bands on these frequencies. They have succeeded in working surprising distances within the restrictions imposed by the FCC rules. Here are the bands that are available.

Below 10 kHz:

The FCC's rules do not consider any operation on frequencies below 10 kHz as radio communication requiring a license. So, one may operate on these frequencies with no power restrictions as long as no harmonics or other spurious radiation is strong enough to interfere with licensed radio communication on higher frequencies. Some have tried to work here and have been successful. The band is not very attractive because these are very long wavelengths, up to 20 miles. A quarter-wave antenna would be five miles long. Shorter antennas will work but efficiency drops off rapidly as an antenna is shortened unless, the Q of the antenna circuit is raised. Increasing the Q decreases the bandwidth, so that any reasonably efficient antenna of practicable size would have a bandwidth too narrow even for manually keyed CW. In addition, the atmospheric noise level is about 60 decibels higher at 10 kHz than it is on, say, 3.5 MHz, so that a kilowatt on 10 kHz would give a signal-to-noise ratio about the same as a milliwatt on 3.5 MHz.

160 to 190 kHz:

This is the favorite band for experimenters. The rules allow power input of up to one watt, and an antenna not over 15 meters in length. Normally, such restrictions would yield a field strength within the limitations mentioned earlier, about 150 microvolts per meter at 825 feet. Ordinarily they would not be expected to provide communication over distances of one mile. By careful construction of transmitters and antennas, and by using such techniques as coherent CW, distances as great as 800 miles have been covered. They are trying to work even greater DX such as California to Hawaii.

Experimenters on this band, who call themselves "Lowfers," swap their ideas and report on their work in a monthly bulletin entitled the "Lowdown." It is published by the Longwave Club of America, 45 Wildflower Rd., Levittown, PA 19057, which also publishes reports of long-wave listeners who have no transmitting facilities; listen for exotic signals on the bands below 500 kHz. The September issue lists nearly sixty beacons operating between 160 and 190 kHz, twenty eight of them being on the air 24 hours a day, located in eighteen states in U.S. and Ontario, Canada. Transmitters are usually homebrew. Receivers include homebrew, converters - both homemade and manufactured, with receivers, and now more commercially built receivers as newer amateur gear more commonly includes a general coverage receiver 150 kHz to 30 MHz. Serious DXers usually add outboard filter, coherent CW filters, etc., to dig down into the noise to find the weak signals. CW remains the mode of choice for this work because voice modes are severely limited in distance. Again, efficient short antennas have a limited bandwidth too narrow for voice operation. Modes like coherent CW, have a 20-30 decibel advantage over voice. So this is a region where CW and home construction are very much alive.

It is of interest that in preparation for WARC-79, the World Administrative Radio Conference held in Geneva, the FCC had proposed opening 160 to 190 kHz to amateurs. The electric power industry opposed it because it feared harmful interference to carrier-current signal, control and communication circuits on power lines. However, the danger seems remote. Privately owned carrier system, such as wireless intercoms, use these same frequencies and inject their signals directly into the power line, with no apparent interference. Still, the FCC thought it more prudent to withdraw the proposal.

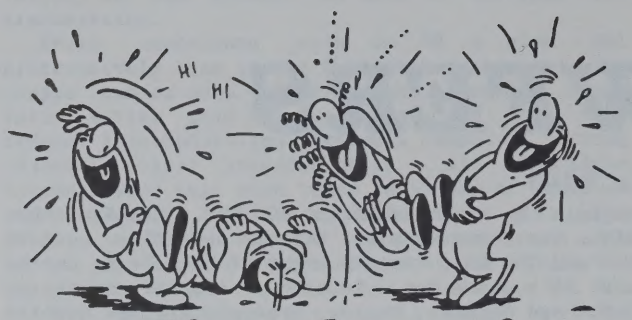
510 to 1600 kHz:

This band coincides roughly with the AM Standard Broadcast band. Power input is limited to 100 milliwatts, antenna to 3 meters. Again, this would normally result in a field strength of 15 microvolts per meter at 100 feet, but the same methods could be used and have been tried as on 160-190 kHz to extend the range. Only a few experimenters operate here, however, finding the lower band more attractive.

49.82-49.90 MHz:

This is the band used by toy walkie-talkies, and by cordless telephones. It is available also for experimenters as are 160-190 kHz, with power input limited to 100 milliwatts and antenna 1 meter long permanently attached to the transmitter. Microphone lead may not exceed 1.5 meters, but there is no limit specified for key leads. Again, this band is available, but has not been used to any great extent.

This is but a brief summary of what is being done. Ken Cornell, W2IMB, has written a Low and Medium Frequency Radio Scrapbook, published by Ham Radio (Communications Technology, Inc., Greenville, NH 03048 which treats both construction and operating matters. Several articles have appeared in various Amateur Radio magazines. Still, this field remains wide open for experimentation and an opportunity for the DXer who has worked everything else in sight. (K4ZN)



radio funnies

Mike Crabtree, ABØX

DXpediton to NURD Island

As told by: Elmer Hinkle, WDØSRI

Every "Real" DXer dreams of someday activating a new country for the first time. When the opportunity to put Nurd Island on the air for the first time came up, Harvey, NOLID, and I jumped at the chance. It turned out to be the DX experience of a lifetime!

Harvey, who works for a large oil company, learned from a communique from an off-shore drilling platform that Mother Nature was creating a new island by an underwater volcano in the Pacific. It started out as a small bubbling speck of land and grew to about a 1/4 mile strip of cooling lava in a week. The location of this new island is about 427 miles south of the nearest land, Mexico.

A quick check of the DXCC rules indicated that it should qualify for "country status" as a separate and independent country if we acted fast enough. Even if we didn't get there soon enough and it was discovered by the Mexican authorities, it would have qualified for country status because of the distance away from Mexico.

Harvey and I acted on impulse and made plans to get there as soon as possible. Both of us had started secret DXpedition accounts at our respective credit unions just for some event like this. Almost all the money in our accounts had come from our collection and sale of aluminum beer cans. Yes, all those 807's had finally paid off. We owe a special thanks to KORWL for letting us clean up his shack after the last contest. The 97 pounds of aluminum collected at RWL's was vitally important in financing our trip.

Harvey packed up his trusty Galaxy V transceiver and I got my SBE-34 and Gotham Quad ready to go. We took extra tubes, fuses, and lots of wire to string up the low band antennas.

However, our biggest obstacle was arranging transportation. We flew to Acapulco and after 3 days of wandering around the wharf we finally hired a boat large enough to get us there safely and back. Captain Juan Valdez Mendoza promised us a safe and speedy trip to our secret island that was slowly growing in size out in the Pacific.

Unfortunately we had some problems. Captain Mendoza went to sleep at the helm our first afternoon out from port and we ran aground and the Mexican Clipper sank, must to our chagrin. We were rescued by a Mexican patrol boat but all of our radio gear was lost at sea. Also, we lost 2 days in the Mexican Drug and Narcotics Detention Center, trying to convince the Mexican authorities that we were American citizens on a radio expedition rather than smugglers. Finally the U.S. government came through and verified our identity.

At this point we were ready to give up and head back to KC, but a local dxer XEOTJ, heard of our situation and came to our rescue with the offer to loan us his spare rig, an Eico 753. Jose also helped us hire a really reliable Sea Captain and we set out again for our DXpedition.

The new ship was named Tuna Taco and we had to compromise a little to get the captain to agree to take us on this unusual trip. Since the ship was primarily used and equipped for tuna fishing, we had to agree to work along with the crew and man the fishing poles on the trip down and back to our secret island.

The trip to the island was generally uneventful except for the exciting experience of locating a school of tuna along the way. It was really tough work physically, but the fish never hit like this at Lake Perry. The big poles really tore up our soft city hands, but luckily both of us are proficient at QLF (keying with left foot), so the blisters and sores wouldn't keep us off CW once we reached the island.

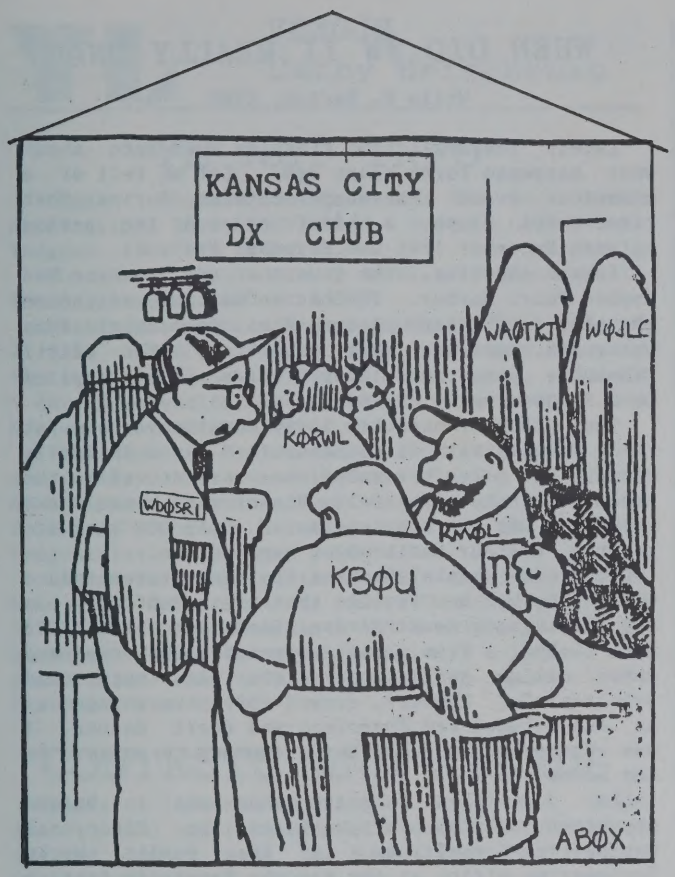
On the trip down to the island we decided to name it after our kids. Since Harvey was the first to learn of the island we used the first initial of both of his girls' names: Nanette and Ursela and my two boys: Ralph and Delmer. Hence, the name Nurd was formulated. We learned later that Nurd also had a special meaning to bicycle enthusiasts. Nevertheless, it reminded us of home.

When we reached the island we noticed an obvious increase in temperature as the undersea volcano was still spewing lava very close to the surface, so we were required to wait 2 full days before a landing on the 1/4 mile long strip of cooled magma could be made. However, while we were waiting another school of tuna came along and Captain Gonzalez was able to fill his hold to the brim with the big fish.

After a hard day of fishing, we decided to join the crew in a little celebration. We toasted Charlie the Tuna with tequila many times and soon found ourselves intoxicated. We had a great evening, though! Between the toasts we watched a "nature film" called Wonda and Her Wonder Donkey, that the Captain had brought along. Harvey commented all the way through the film that they never had films like this back at the VFW meetings at home in Tonganoxie!

On the third day we were able to make a safe landing on the island, but we made it very quietly with respect for everyone's hangover. As soon as we reached the shore, we had a short ceremony where Harvey claimed ownership of the island and proclaimed himself King. His first act was to appoint me as assistant King and Chief Communications Officer for Nurd Island. I then issued the call: 1N1URD for our DXpedition station. We set up a card table next and got the Eico 753 on the air with some wire antennas.

Our first official QSO was with KBOU who arranged phone patches for us to our XYL's and kids. However, some of the guys on 20 got a little impatient and began QRMing us. Of course, before long the Belcher appeared on frequency as he usually does with his obnoxious contribution. Unfortunately, Mary Lou, my XYL, not being familiar with 20 Meters, thought it was me that kept



"AH, EXCUSE ME SIR.
I WANT TO BECOME A DXER!"

belching and got quite upset thinking I was sick. Somehow she got it in her head that I had forgotten my Rolaids tablets and I was in great pain. Eventually, we got things straightened out and I moved to 14.195 MHz and started working the howling pile up only after I checked into the KCDXC Net that had been moved to 14.315 MHZ for this special occasion. I was able to work 61 of our 73 members before the guys found us and began calling on top of our Net. Nevertheless, most Club members got through.

I was able to work 153 of the Deserving in my first 4 hour shift. Of course, I worked by Districts starting with the Zeroes! Harvey worked the next shift and was able to log over 140 contacts. On 20 Meters we learned which Club member had the best signal out of KC. All WOAR had to do was clear his throat and say, "Ahem, Harvey, how are you guys doing tonight?" On 75 Meters that first evening NOXA was so loud when he broke the pile up we could hear his heart beat between words!

The refreshing sea breezes kept us alert till nearly midnight, when we took our first real break from the pile ups and had some dinner. The cook had sent over to the island his specialty, Tuna Tacos, a dish named after our ship. We learned that evening why the Mexicans drink so much Tequila with their food. As we were relaxing over our meal, we noticed a strange glow of orange just off shore from our operating QTH. In a short while it became apparent what the orange glow was when the lava began shooting up into the air and landing in loud splats all around us!

Soon the water began to boil and bubble and the smoke and ash began choking us. We went back to the rig and tried to keep our rate up for a while longer, but it was almost impossible to breathe. Captain Gonzalez sent a boat to get us and the crew stood on board yelling and waving at us to hurry and get off the island. Luckily we escaped with no injuries and Mary Lou's card table was the only casualty, as a big glob of lava landed right in the middle of the table while we were loading the rig in the boat.

We have sent to the ARRL all documentation necessary for DXCC approval. Our only regret is that we were only able to make about 300 QSO's, but Mother Nature cut short our DXpedition. We want to thank all the guys in the KCDXC for their help and support. If you didn't work us, you must not have been home on the night of March 25th, the date of our 12 hour long DXpedition to Nurd Island! (ABØX)

The LID LiDst

Robert May, K4SE

Most radio amateurs know that the term "lid" is used to denote a poor operator. We have used that word since the dawning days of the hobby. Methods of operating have come and gone as the state of the art has changed, but nothing the engineers and scientists have done so far has been able to rid us of these pests! Whoever comes up with a "lid filter" would make a mint in the first month...but perhaps not. Had my receiver been equipped with such a filter several nights ago, the entire seventy-five meter band would have been blanked out (or so it seemed to me). My "off" switch was the best lid filter I had at the time.

But enough of that. The purpose of this article is to convey to you, the reader, my collection which I have called the "Lid Lidst." A lot of my operating is involved with chasing DX (already some of you are calling me a lid because you can't stand DXers - but please hear me out anyway). Because of this I have divided my "lidst" into two groups: Common Lids and DXing Lids. So without further delay, here we go!

Common Lids

Lids who fail to ask if a frequency is in use before transmitting.

Lids who ask if the frequency is in use, you say yes, and they go ahead and transmit anyway.

Lids who don't say the frequency is in use when you ask and who get mad when you start transmitting.

Lids who turn their processors on full blast, resulting in their transmitting a 10 kHz. wide unintelligible signal (they deserve not to be understood).

"The Woodpecker." What I wouldn't give to be in the right place with a large brick in my hand!

Lids who don't tune into dummy loads.

Lids with $2000+ stations who say they "can't afford" dummy loads.

Lids who claim that a particular frequency is "reserved" for a particular net, mode, group, etc. and maintain you must QSY or else.

Lids who deliberately QRM legitimate valuable international phone patches.

Phone patch lids who abuse the privilege by operating in busier portions of the band.

Lids who deliberately QRM emergency communications (a criminal act!).

Lids who use "cutsie" phonetics.

The lid who just tune up my QSO!

Lids who say unkind things about another ethnic, geographical, national or religious group.

Lids who say "WSL fer sure" who never do.

Lids who "kerchunck" a repeater without giving their calls.

Old timer lids who speak unkindly about younger hams.

"Young squirts" who speak unkindly about older hams.

Lids who curse over the air. There is NO excuse for over-the-air profanity.

Lids who call "CQ" umpteen times without signing their calls.

Lids who try to use a bug or a keyer without mastering use of the device off the air.

DXing lids.

DX stations who show their lidsmanship by signing their calls about every 20 minutes (Doesn't everyone know who I am!?)

Lids who call the DX station's calling frequency when he is listening elsewhere.

Lids who tell the caller he is stupid for the above right on the DX stations' calling frequency.

Lids who live in W "number" who call a DX station when he asks for an area "another number." Insert numbers of your choice.

Lids who live in W "Number" who call a DX station when he asks for area "another number" claiming they are portable "the other number." Insert numbers of your choice.

The lid or lids who "decided" that some nearly inaccessible and completely uninhabited and uninhabitable rock in the middle of the ocean is a "country."

Lids who "suggest" that the DX station work stations a "different way."

Lids who say lists are the only way.

Lids who say lists should be completely eliminated.

Lids who drone on and on and on and on...in a pileup...especially after the DX station has started a QSO.

Contester lids who QRM a "rare one" not in the contest.

Lids who deliberately spoil a contester's enjoyment by calling "CQ DX" right on the contester's frequency.

List lids who relay signal reports.

List lids who guess signal reports.

Lids who shout "What's his call?" on the DX stations' frequency.

Lids who shout "Where is he transmitting?" on a split-operation DXer's LISTENING frequency.

So there you have it? If I stepped on your toes "just a little bit," then I'm sorry. I'll also admit to doing some of these "liddy" things myself. I'll try to do better if you will? But if I stepped on your toes a lot, then maybe I'm not quite as sorry. We really need to purge lidism from our bands. The better our quality of operation, the more enjoyable it will be for us all. (Worldradio)

SOME NERVES!

Did you know that the human body is far more intricate than the usual highway system? There are some 100,000 miles of nerve fibers along which messages zip at speeds up to 300 miles per hour.

WHEN DID WW II REALLY END?

Wells E. Barton, N4EE

Lately the media have given us much info about what happened forty years ago. Let me tell of a momentous event that happened to me during that time. But first, a brief review of the period between December 1941 and November 1945.

It was shocking...the news that the Japanese had bombed Pearl Harbor. The ban on amateur radio came abruptly. The ban was complete. No transmissions by radio amateurs were permitted. The edict: Dismantle your transmitter or have a seal applied by U.S. Government personnel.

The W8PCW transmitter in my dormitory room at the University of Cincinnati was dutifully dismantled. Its bit and pieces were stored in the basement of the Alpha Delta Pi sorority house where my mother was the "housemother." Only GOD knew if, or when, Amateur Radio would ever return.

With the mental healing that has taken place with time, I now realize that my tour of duty in the U.S. Navy Construction Battalion, (SEABEES) wasn't bad. True, boot camp and combat training under marine drill instructors was tough and frustrating. However, except for a scary incident at sea between San Francisco and Pearl Harbor, I was fortunate in never being exposed to action by the enemy.

In June 1944 I began what was to become seventeen months of work as an Electrical Engineering draftsman in the Public Works Engineering office at the Kaneohe Naval Air Station in Hawaii. It was good duty! We worked about forty hours per week. Weekend liberty began after a brief inspection early Saturday afternoon. The weather was perfect. Kialua beach was beautiful. Trips to Honolulu and other parts of Oahu were pleasant. The USO dances were fun times.

In the summer of 1945, the war news started to improve. V-E day had come and gone and the allies were concentrating on the war in the Pacific. Those two horrible bombs were dropped to help end hostilities much sooner than they could have otherwise.

V-J day became a reality...but there was something lacking...was the war really over?

General MacArthur accepted the surrender of the Japanese...the war must be over...or was it?

Many peacetime Navy procedures occurred rapidly. No longer could we go to the mess hall after 1700 in fatigues. Whites must be worn for chow. The war must be over...Still?

Finally, in November 1945 my accumulation of points allowed me to plan ahead. I turned over my 'moonlighting' paper route to another. I shipped home the personal tools, books, and radio equipment I'd used for repairing radios of my mates, (another 'moonlight' activity). I turned in the GI equipment, the carbine, the helmet, the water canister. I was headed for Pearl Harbor, San Francisco, Great Lakes, Cincinnati...The war must be over...However...?

And then, the moment I'll never forget! When leaving the barracks at Pearl Harbor it came...from a little Echophone receiver across the room...a 5 by 9+ signal..."THIS IS W5--- CALLING CQ, TEN METER PHONE"...The ban had been partially lifted. With a lump in my throat, almost tears in my eyes, it was then that I knew...for me, at last...World War II was over! (Worldradio)

YL

VE3GJH
Cathy Hrischenko

YL NET INFO

CLARA (Canadian Ladies Amateur Radio Association) has established a new net frequency. Tuesday, 1900 UTC at 14.133

There is also a new 40 meter net which meets Tuesday morning 1400 at 7.088.

The African Queen Net meets Monday 2030 UTC at 14.233. Don't forget that YL activity day (international) is the 6th of every month. For CW - any frequencies ending in 33. For phone any frequencies ending in 88.

The Buckeye Belles are celebrating their 25th Anniversary this year and are having a Silver Anniversary get together at the Holiday Inn Delaware, Ohio, Saturday, April 12, 1986. Congratulations Buckeye Belles!

To advertise and publicize this event they will hold a QSO Party starting 1200 UTC Saturday, March 15 and ending Sunday March 16. After partaking, send your log information along with a request for certificate and SASE to KA8MPH 1241 Comet Road, Clinton, Ohio 44216.

CONTESTS AND AWARDS

ALARA (Australian Ladies Amateur Radio Association) has revised their award. For copy of revised Award send to Award Custodian Mavis Stafford VK3KS.

BYLARA (British Young Ladies Amateur Radio Association) contest will be held Thursday February 27 and Saturday March 1, 1986. I have no particulars at this time.

GIRL GUIDE JOTA

CQ Girl Guides, Leaders and Amateur Radio ops. Last year Canada Girl Guides celebrated their 75th Anniversary. CLARA and the Girl Guides had their first annual JOTA. This year during Thinking week February 16 to the 23, the JOTA will be active again. Most activity will take place during weekday evenings and on Saturday. All are welcome to partake. Invite your local group over and get on the air. If you want to arrange a sked, contact Susan VO1OI or Cathy VE3GJH. Then let me know about your participation.

Reminder:

DX YL to North America Contest
CW April 9-10, Phone April 16-17
CLARA AC-DC Mystery Contest May 27-28
Info on these later.

I'd be happy to receive any info on up-coming YL contests and certificates or any special information about YL organizations.

73/33/88 as the case may be Cathy VE3GJH

OPERATING THE SMALL STATION

Paula Franke, WB9TBU

When I first contacted Yuri about taking on a column for one of the RADIOSPORTING departments, I really didn't have any particular subject area in mind. Yuri suggested perhaps a "Sporting YL" column. While I am a YL (and a "sporting" one at that), I've never really thought of ham radio in terms of gender differences. (Except, of course, for the perennial debate as to the advantages of having a YL voice on phone.)

So, was there some other topic "close to my heart?" As a matter of fact, there is: the care and feeding of the low power station. Let me hasten to point out an important distinction here. I'm not talking about QRP or QRPp. I'm talking about under 200 watts, under 100 watts all the way down to almost, but not quite, QRP. How does this station compete with the kilowatt superstations? Since I usually operate around 50 watts, I know what a no man's land this can be. Since I am an avid contester, I have come up with a few ideas on the subject, and I'm sure others have as well.

So, with only a modest station and antenna set-up, what's in it for the small time operator? Is it worth it? Just a glance at the results of the major contests in CQ and QST show that hundreds and thousands participate, most with no chance of winning anything other than having their calls listed in a national magazine. Why do they bother? To pick up some new DX, to gain needed contacts for an award, or maybe just the satisfaction of getting out there and mixing it up with everybody else.

I've given up (for the moment) the idea of winning the November Sweepstakes or any of the major DX contests. Given my present set-up, it ain't gonna happen. But over the years I've come up with a few ideas to make contesting a little more rewarding. And I have a wall full of certificates (and a plaque!) to show for it.

1.If you want wallpaper, go for the smaller regional contests, both stateside and DX (more on this in a future column).

2.Compete one on one or in a group with friends. Go for honors in categories like total points, total multipliers, highest one hour QSO rate, etc. Compete one on one, your club against another club the same way.

3.For a change of pace, multi-op a major contest. Our local group has been doing this for Sweepstakes (under the call WA9AWO) for the last two years. We go at it seriously, our scores keep getting better, and (most important) we have a great time.

4.Maybe you don't want to even try to win - that's OK! Go for needed DX, or countries or states. A friend here has been working on 5BWAS for several years. About the only time he actively tries to pick up needed contacts is during the annual Novice Roundup.

This last comment brings to mind a pet peeve of mine, and since it's almost Novice Roundup time again, it bears mentioning. The last couple of years I've heard numerous complaints from Novices that some G/A/E ops are making the Roundup hazardous. (I've also heard this same complaint from some of the higher classes that participate.) Specifically, there are some higher class ops who call CW (against the rules) and acting like this is a contest for them too. Every year the situation seems to get worse. Come on guys, some of these poor Novices and Techs are confused enough as it is, so give them a break. Go ahead and answer their timid CQ's but don't add to the noise by calling CQ yourself.

I sure would appreciate hearing from other 'modest' station operators. Let me know how you've managed to cope. 73, Paula WB9TBU

Chuck Clark, K4ZN

TRAFFIC EMERGENCY

HC 69, Box 800, Moncks Corner, SC, 29461

NIGHT TANGO

The National Communications System (NCS) in the United States has been conducting tests in its operation Night Tango for some time now, to evaluate the reliability and availability of the various communications systems that could provide emergency contacts should they be needed. Typically, a representative of NCS will call an amateur, a Civil Air Patrol station, and a MARS station (to our knowledge REACT, the CB emergency organization has not participated yet), giving each a message to be sent to a distant part of the country. Then the agency evaluates the performance of each with regard to speed and accuracy.

Such tests are made several times a year in various parts of the country, and the results are varied. It has all been done rather quietly. Much of what is known about the tests has come from the participants rather than the NCS itself. NCS could understandably feel that national security considerations would indicate that it would be better not to publicize too widely the tests and their results.

Generally, MARS circuits get good reports because it makes use of military stations as well as civilian amateur stations. Therefore they can reliably monitor a frequency at any time. It is often only a matter of minutes before the reply reaches the sender of the original message. MARS is doing the job it was designed to do, and usually does it well.

The amateur record has been more spotty. Sometimes it gets through splendidly. But often it does not. Bob Franklin, K6TP, tells of one time last November when it did not. "I emerged embarrassed, having seen my efforts and those of the one other participant from here, Dick Dillman, N6VS, result in abysmally ignominious failure." He received the phone call with his test emergency message at 6:20 p.m. local time, tried without success to put it into RN5 to speed it on its way to Dallas, Texas, but propagation conditions were unfavorable. He could hear RN5 but they could not hear him. He tried also to work into the Texas section net, but without success. Finally he gave it to RN6 to go via the normal channels, as nothing faster seemed possible.

He tried again the following morning but propagation still worked against him. He heard nothing further until six days later when he received a service message from a Fort Worth station saying that the message could not be delivered as the phone number was invalid. "By a coincidence," he says, "I overheard a similar service message addressed to N6VS reporting that his messages were also undeliverable since they had been badly garbled in relay. So much for NCS's reliance on Amateur Radio and the only established national system for handling third-party traffic. I wonder if ARRL will ever hear from them again."

The messages, as given by NCS, had no street address, only a telephone number. Perhaps Bob should have asked for a street address, but perhaps also he did and was told non was available. Anyway, the message should have been handled without garbling the address. There's no excuse for garbles.

What else went wrong ? Plenty. First of all, a test emergency message should be handled just as an emergency message would be, except that a real emergency message would take precedence over it. Also, an amateur handling a test emergency message would not be expected to make a toll call to deliver it if that should happen to be the quickest way. When Bob checked into RN6 listing as an emergency message for Dallas, everything else on the net should have stopped, resumed only after the net has done everything possible to speed the message on its way. He would not list it as "for Pacific Area Net -PAN." An emergency message bypasses normal NTS channels if there is another way to move it more rapidly. If the station best suited to handle the message happens to be off frequency passing traffic, the net control operator should have directed Bob to go to that frequency, break in immediately, and pass the traffic, even interrupting if necessary a message in the process of being handled.

Then of course,there are the garbles. Somewhere along the line an operator was not careful to copy what was sent. He gave a receipt for the message, saying, "I received your message and I am certain I have it correctly," which is what R or Roger or QSL means, even though the message was not received correctly. That is one thing we lack in Amateur Radio, quality control. One wonders whether our attitude that we're all volunteers and so we can't scrutinize our operators' performance too closely because we need all the help we can get, might not be replaced by the idea that there are some operators that our traffic system would be better without. But then we don't want to discourage newcomers either. It's a dilemma.

Finally, six days for a service message to reach the originator in an emergency is scandalous. A service message takes the same precedence as the message being serviced. So if the original message was test emergency, the service message will also be test emergency, and should be handled just as an emergency message would be. It stops everything else on the net until it is cleared.

ALTERNATIVES

The National Traffic System is not the only net in town. While it does provide nationwide coverage, its system of regularly scheduled nets and standardized routings does not provide the fastest possible service. There are other possibilities, such as the CARS systems, 7250-7255 kHz, or the independent nets on 80, 40, 20 meters, particularly the frequency 14,313 kHz which seems

to be used around the clock for maritime mobile and other traffic. It has very good coverage to all parts of the United States.

There is still the problem, though, that you are likely to encounter the amateur who thinks that handling such traffic isn't "Amateur Radio." "That's not what Amateur Radio is for," you will be told, despite the fact that it's the very first item in Section 97.1 of the FCC's regulations. They don't realize that it's our participation in such activity that is responsible for the support we receive from the FCC against efforts by people with more funding and more clout who would like to take our bands.

Furthermore, the messages are not as imaginative, as the ones we exchange during our Simulated Emergency Test (SET). It may only be, "Message number four. Please acknowledge." And the reply, "Message number four received 121830Z November." Hams who rate messages by their apparent importance may well give such messages a low rating. But it's the importance to the originator and addressee that matters, not the importance to the operators in between. That is another thing that the NCS is trying to determine. What chance is there that operators along the way will shunt it aside.

Let's never forget that Amateur Radio is a Service. It is because of the service that we are allowed to ham. (K4ZN)

DIARY OF AN EARTHQUAKE

John Moore, NJ7E/XE1HDO

Part 3 - conclusion

I met a number of other interesting people in Mexico. There were several American missionaries, all of whom were amateurs and had stations, and were assisting in various ways with the disaster. One of the most impressive groups I found was a Baptist disaster relief organization. They had 18 wheeler trucks from a number of southern states (Texas, Oklahoma, Mississippi, Louisiana, [others?]). These contained complete field kitchens and a well equipped ham station. I visited the Texas truck, and the station there had a tri-band beam on a tower, a two meter base, and a bunch of two meter hand helds. These folks were using XE2CRT/1, and operated on 146.43 simplex and 14.340. They did not take health and welfare traffic--their business was operating kitchens for those made homeless by the quake.

I also operated for a time from the headquarters of the Mexican Rescue Association, which is some sort of civilian "civil defense" organization which was performing rescue work and was coordinating a number of other volunteer groups. Jim Ripps and myself were made members of the organization.

Shortly after I arrived, we began to get reports such as "there is now limited telephone service into Mexico City" and "The Red Cross has telex working and can handle H & W traffic that way." Every time this was announced to our net, we were immediately told, by any number of Red Cross chapters and Mexican consulates on our frequency, that amateur radio was the only way to get H & W into Mexico City. Even on Saturday evening, October 5, 16 days after the quake, this was still the case.

We learned, after a visit to the Secretariat for Communications and Transportation (sort of the FCC, Telephone Company, and a trucking company, all rolled into one entity) that the international circuits never went out. They had a very large antenna farm of large dishes, and it was working fine. The problem was that the central switching office in downtown Mexico City had been reduced to a heap of rubble. Thus, their was service into the SCT offices, but they couldn't move the calls from there. I was able to place calls to the states from the Sheraton and the Embassy on Sept. 30.

Finally, I must say that the Mexican people were very appreciative of our efforts and those of all the volunteers. A number of people we called were so touched that they cried. Many offered to help, to provide a place to stay, to provide food, even to provide tours of the pyramids. There was a genuine feeling of international fellowship. A little boy passed a note to the embassy guards which, when translated reads:

"My name is Rocio. I'm 6 years old and I thank you very much for coming to try to save my countrymen. Thank you for your doctors, for your technicians, for your dogs. I love you very much and send you a kiss.

Rocio"

- by John Moore, NJ7E/XE1HDO, with assistance from Carlos, XE1HC; Jim Swafford, W7FF; and Jim Ripps, N5CSH/XE1CSH. (Westlink Report)

MEXICO: THANK YOU!

Mexico has officially thanked the world amateur radio community for its help in providing disaster relief communications after the pair of earthquakes struck the nation's capital on September 19. According to the Associated Press and United Press International, the Mayor of Mexico City issued this statement which says, in part:

"We thank radio amateurs for their fine behaviour, and most especially for the help that they rendered to our agencies, such as the Minister of Internal Relations, and to international relief organizations like the Red Cross, the Salvation Army and many others. Thank you all from the heart of the City of Mexico."

The report noted that hams sent over 200,000 messages into the devastated area, with another 120,000 originated in Mexico City and sent to other countries. (Westlink Report)

TAPR'S NEW HORIZON

The Tucson Amateur Packet Radio Corporation (TAPR) has announced its intention to cease its Terminal Node Controller (TNC) production business after the last 50 to 60 TNC-2 units have been sold.

TAPR manufactured 1200 of these, but has now sold the manufacturing rights to AEA, who will shortly introduce a wired an tested version of the former TAPR kit.

TAPR will now concentrate on linking. A link controller, close now to the prototype stage, has been designed by Dayton Technical Merit Award winner Lyle Johnson. (Tnx Wisconsin Packeteer)

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SUPPORT *RADIOSPORTING* ADVERTISERS

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Mike Spenuk, VE3JTQ

INDONESIAN

ORARI AWARDS PROGRAM

ORARI (Organisasi Amatir Radio Indonesia) has the pleasure to announce herewith the issue of a new awards program, i.e.

1. The "Jakarta Award" (JA/SWL-JA), for confirmed contacts with, or having heard from, licensed amateurs in Jakarta (0 call area only), the capital of the Republic Of Indonesia.

2. "Worked all Indonesia Award" (WAIA/SWL-WAIA), for confirmed contacts with, or having heard from, licensed amateurs in each of the Indonesia call areas.

3. "Worked the Equator Award" (WTEA/SWL-WTEA), for confirmed contacts with, or having heard from licensed amateurs in countries along the equator.

General Rules:

ORARI Awards will be issued to licensed amateurs for 2 x SSB, 2 x CW, 2 x RTTY, mixed or single mode all band or single band in 80, 40, 20, 15 and 10 meter bands only. SWL Awards in the same category will also be available.

The applicant may request endorsement for such distinction accordingly.

To be valid, all contact or listening must be made on or after July 9, 1968.

Claim must be accompanied by a QSL Card List (GCR) furnished with the callsigns of station worked, dates, bands and modes of contacts meeting the requirements of the award concerned. Rules and requirements will be specified, when required, in each of the awards program.

QSL Card List must be accompanied by a statement from the applicant's national society, club station, or from any two amateurs other than the applicant, that the QSL cards of the contacts listed are in the possession of the applicant, and that the items of the cards are correctly listed.

A fee of $8.00 US Funds only, or 16 IRCs will be charged per award and should be sent along with the application to the respective awards manager.

Only contact with land station within the same country will be acceptable.

JAKARTA AWARD
(JA/SWL-JA)

1. The "Jakarta Award" is available to licensed amateurs the world over.

2. Issued for confirmed contacts with, or having heard from stations in Jakarta (0 call area only), the capital of the Republic of Indonesia, with the following requirements:

a) DX stations need confirmed contacts with, or having heard from, a total of twenty stations including at least one Jakarta Club station.

b) Indonesian amateurs need confirmed contacts with, or having heard from, a total of fifty stations including at least five Jakarta Club stations.

c) To apply, send the log extracts (GCR), in alphabetical order by prefix along with the award fee to the Award Manager: Mr. M. S. Lumban Gaol, YB8WR, P.O. Box 96, Jakarta 1002, Indonesia.

d) QSL cards are required for the application from the Indonesian licensed amateurs operating within the 0 call area. A self addressed stamped envelope (SASE) or sufficient funds for the return postage will also be required.

e) List of club stations in the 0 call area is listed below:
YB0ZAA, YB0ZAB, YB0ZAD, YB0ZAE, YB0ZAF, YB0ZBA, YB0ZBB, YB0ZCA, YB0ZCB, YB0ZCD, YB0ZCE, YB0ZDB, YB0ZDC, YB0ZDD, YB0ZDE, YB0ZDG, YB0ZEA, YB0ZEE, YB0ZZ.

Worked all Indonesia Award
(WAIA/SWL-WAIA)

1. The "Worked all Indonesia Award" (WAIA/SWL-WAIA) is available to licensed amateurs the world over.

2. Issued for confirmed contact with, or having heard from stations in each of the Indonesia call areas (1 to 0) under the following requirements:

a) DX stations other than those in CQ zone 28 need confirmed contacts with, or having heard from two stations from each call area; total of twenty QSL cards.

b) DX stations in CQ zone 28 need confirmed contacts with, or having heard from, three stations from each call area; a total of thirty QSL cards.

c) Indonesian amateurs need confirmed contacts with, or having heard from, five station from each call area; a total of fifty QSL cards. Contact with, or having heard from three different station class (YB, YC, YD) in the same call area is a must.

d) To apply, send the log extracts (GCR), in alphabetical order, a total of thirty QSL cards.

e) Indonesian amateurs need confirmed contacts with, or having heard from, five stations from each call area; a total of fifty QSL cards. Contact with, or having heard from, three different stations class (YB, YC, YD) in the same call area is a must.

f) To apply, send the log extracts (GCR), in alphabetical order by prefix, along with the award fee to the award manager: Mr. M. Maruto, YB0TK, P.O. Box 96, Jakarta 10002, Indonesia.

Worked the Equator Award
(WTEA/SWL-WTEA)

1. The "Worked the Equator Award" (WTEA/SWL-WTEA) is available to licensed amateurs the world over.

2. Issued for confirmed contacts with, or having heard from, countries according to ARRL DXCC Country list along the equator as follows: C2, HC, HC8, HK, KH1, KB6, PP-PY, PY0 (St. Peter), S9 (Sao Tome), T30, T31, T32, TN, TR, YB5, YB7, YB8, 5X, 5Z, 6O, 8Q, 9Q.

3. The WTEA (SWL-WTEA) will be issued in three classes:

Class I - For confirmed contact with, or having heard from, fifteen countries.

Class II - For confirmed ocntact with, or having heard from twelve countries.

Class III - For confirmed contact with, or having heard from eight countries.

For all classes, contact with or having heard from YB5, YB7, and YB8 is obligatory.

4. To apply, send your log extracts (GCR), in alphabetical order by prefix along with the award fee to the award manager: Mr. Ben S. Samsu, YC0EBS, P.O. Box 96, Jakarta 10002, Indonesia.

AWARD NOTES

When applying for an award, courtesy demands that you observe the following:

1. Print your name, callsign and address.

2. Clearly state what award and endorsements you are applying for.

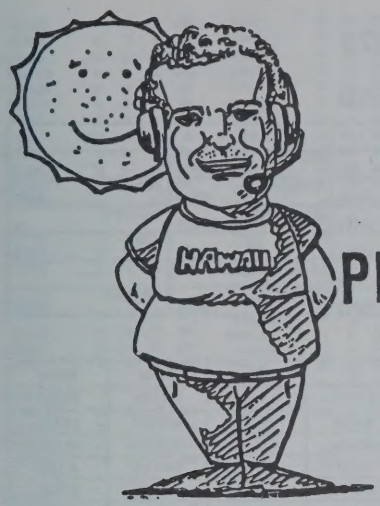
3. Send the application to the respective award manager according to the award claimed and enclose the award fee (in Money Order or IRCS) as requested. Personal check is not accepted.

4. For the Indonesian amateurs application must use the model-K form issued by the National QSL and Awards Bureau and verified by the assigned regional checkers.

5. ORARI stresses the honor of fair play and sportsmanship of the applicant working towards these awards. Use of poor ethics will result in permanent disqualification.

6. All correspondence should be sent to:
ORARI National QSL & Awards Bureau
P.O. Box 96, Jakarta 10002, Indonesia

7. The Indonesian licensed amateurs many send the cards directly or have them verified by the ORARI Awards checkpoint nearest to their location. Current checkpoints or regional checkers include:
Call Area 1: YB1DRE, YB1HF
Call Area 2: YB2SV, YB2BJM, YB2BLI
Call Area 3: YB3CDL, YB3DC
Call Area 4: YB4FW
Call Area 5: YC5NOF
Call Area 6: YB6HK
Call Area 7: YB7BC, YB7UE
Call Area 8: YB8QD, YB8AY
Call Area 9: YB9VA
Call Area 0: YB0JH (TNX DJ9ZB)



KH6BZF PROPAGATION REPORT

Lee Wical, KH6BZF

Statistical information is compiled by KH6BZF and processed on a computer by VE3BMV.

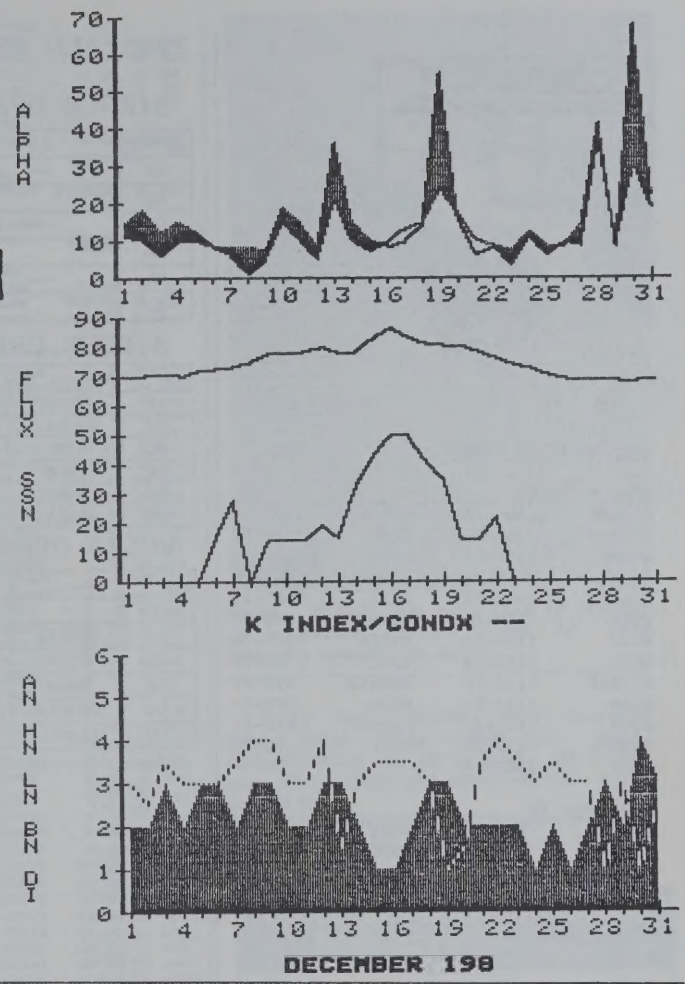
The first diagram shows the value of solar flux (top curve) and SSN - sunspot number (bottom curve). The X axis and scale is the same for both. The Y - axis is calibrated in days of the month.

The second diagram shows variation of the Alpha Index for each day. The dark shaded area shows increases, while the white area shows decreases in the value of the Alpha Index for each day.

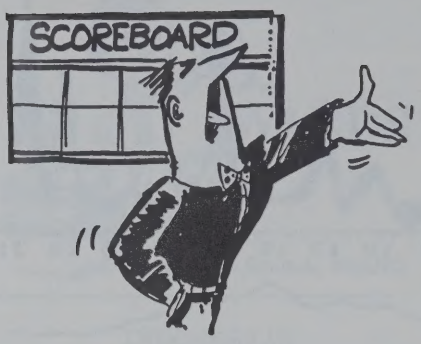
The third diagram shows the value of the K Index (shaded area) on a scale from 0 to 6. The dotted line represents the propagation quality where the scale is: from 5 = Above Normal to 1 = Disturbed.

FORECAST:

BEST HF CONDX: JAN: 29 - 30
BEST VHF CONDX: JAN: 20 - 22



DEC '85	CONDX	SOL FLUX LEVEL	SSN#	GEOMAGNETIC LEVEL	ALPHA INDEX	K INDX	NOTES
01	LN	070 VY LOW	0	ACTIVE-UNSETTLED	11/15	K=2	NO SUNSPOTS
02	LN-BN	071 VY LOW	0	UNSET-ACTIVE-QUIET	10/18	K=2	NO SUNSPOTS
03	HN-LN	071 VY LOW	0	UNSETTLED-QUIET	06/12	K=3	NO SUNSPOTS
04	LN	070 VY LOW	0	UNSETTLED-QUIET	10/15	K=2	NO SUNSPOTS
05	LN	072 VY LOW	0	UNSETTLED	10/12	K=3	RGN 4705(0) S21, W29
06	LN	073 VY LOW	15	UNSETTLED	08/08	K=3	RGN 4706(5) N21, W31
07	LN-HN	074 VY LOW	28	UNSETTLED	06/08	K=2	RGN 4706(6) 4707(2)
08	HN	075 VY LOW	0	QUIET	01/08	K=3	NO SUNSPOTS
09	HN	078 VY LOW	14	QUIET-UNSETTLED	05/07	K=3	RGN 4708(4) N05, E89
10	LN	078 VY LOW	14	UNSET-ACTIVE-M.S.LVLS	15/19	K=2	RGN 4708(4) N05, E76
11	LN	079 VY LOW	14	ACIVE-QUIET	10/14	K=2	RGN 4708(4) N04, E63 GEOMAG ACT. HIGH LAT.
12	HN	080 VY LOW	19	QUIET-UNSETTLED-M.S.	05/08	K=3	RGN4708(9) N04, E35 -13/1800 UTC
13	BN-DIS	078 VY LOW	15	UNSETTLED-ACTIVE-M.S.	21/36	K=3	RGN 4708(5) N04,E22 STORMY @ 13/0300
14	LN	079 VY LOW	32	UNSETTLED-ACTIVE	10/15	K=2	RGN 4708(7) N04, E09 RGN 4709(5) S09, E32
15	HN-LN	083 VY LOW	43	UNSETTLED-ACTIVE-M.S.	07/10	K=1	RGN 4708(16) N04, W04 RGN 4709(7) S09, E18
16	HN-LN	087 VY LOW	50	UNSETTLED-QUIET	10/08	K=1	RGN 4708(19) N03, W16; 4709(11) S09, E05
17	HN-LN	083 VY LOW	49	QUIET-M.S. LVLS	13/10	K=2	RGN 4708(15) N03, W26; 4709(14) S09, W05 FLARE B4/?? @ 17/1930 UTC
18	LN	081 VY LOW	41	QUIET-M.S.LVLS	15/14	K=3	RGN 4708(8) 4709(13)
19	STORMY	080 VY LOW	34	QUIET-MAJOR STORM	24/55	K=3	RGN 4708(6) 4709(8)
20	DIS-LN	080 VY LOW	14	ACTIVE-QUIET	17/16	K=2	RGN 4708(4) N02, W55; 4709(10) S10,W37
21	LN-HN	078 VY LOW	14	UNSETTLED-QUIET	10/06	K=2	RGN 4708(1) N02, W74; 4709(7) S10, W52
22	HN	076 VY LOW	22	UNSETTLED-QUIET	08/08	K=2	RGN 4708 (PASSING OFF DISK)----------+
23	HN-LN	074 VY LOW	0	QUIET	03/07	K=2	RGNs 4708 & 4709 PASSED OVER THE WEST LIMB
24	LN	072 VY LOW	0	QUIET-UNSETTLED	11/12	K=1	NO SUNSPOTS ;
25	HN-LN	070 VY LOW	0	QUIET	06/08	K=2	NO SUNSPOTS (RGN 4709(4) S10, W66) <+
26	LN	069 VY LOW	0	QUIET	09/08	K=1	NO SUNSPOTS
27	LN	069 VY LOW	0	UNSETTLED	08/14	K=2	NO SUNSPOTS
28	DIS	069 VY LOW	0	DISTURBED-M.S. LVLS	37/41	K=3	NO SS. M.S. BEGAN @ 28/0300 ENDED @ 1800
29	LN	068 VY LOW	0	UNSETTLED-ACTIVE	09/08	K=2	NO SUNSPOTS
30	DIS	069 VY LOW	0	UNSETTLED-M.S. LVLS	30/68	K=4	MINOR-MAJOR STORM LVLS-DISTRUBED M.S. BEGAN @ 30/0300-1500 UTC
31	BN-LN	069 VY LOW	0	ACTIVE-UNSETTLED	19/22	K=3	NO SUNSPOTS



ARRL SS SCORE RUMORS

High Power CW			
K6LL/7	1191-74	W3LPL	1100-74
K4VX/0	1180-74	K6NA	1075-74
W5WMU	1170-74	W2RQ	1070-74
N5JJ	1169-74	K5ZD/1	1063-74
K5LZO	1149-74	N8II	1067-73
KY7M	1149-74	K1ZM	1040-74
K5GO	1141-74	W1WEF	1009-74
W6AQ	1138-74	KM0L	960-74
WA7NIN	1131-74	WD8IXE	910-74
N5AU	1123-74	K9ZO	800-74
K5GN	1120-74	K1IU	812-73
N6TR/7	1112-74	W3YY	750-74
N6RO	1101-74		

Low Power CW			
WOIJR	850-74	N4TY	756-72
KY2P	859-73	KU8E	830-74
WC4E	833-74	WB3JRU	576-70
KM5H	800-74		

Multi-Operator CW	
KJ9D	1126-74

High Power SSB			
K6NA	1907-74	K3ZO	1450-74
WA7NIN	1902-74	K9ZO	1290-74
AA5B	1874-74	AH2U	1260-74
N6BV	1868-74	N4ZC	1250-74
N2IC/0	1845-74	KM1C	1240-74
K4VX/0	1814-74	K5MR	1200-74
WS4Q	1810-74	K1VUT	1150-74
N5AU	1805-74	W8LT	1023-74
K5RR	1645-74	N4AA	1000-74
AC9C	1550-74	K1IU	800-74
N4KG	1530-74	KY1H	800-74
W1WEF	1510-74	K1AR	836-72

Low Power SSB			
KE5CV	1161-74	W3YY	1054-74
KM5H	1116-74	K5ZD/1	488-70
KY2P	1076-74		

Multi-Operator SSB			
WB8JBM	1881-74	KK9V	1550-74
KN6M/5	1701-74	W6BIP	1333-74

CLAIMED SCORES CQ WW DX

CW

VS6DO (JA5DQH opr.)
A 2471 117 225 1563282

Results of the 8th Annual 1985
YK/ZL Oceania World Wide RTTY Contest.

Single Operator		
1.	UT5RP	1,278,688
2.	VK5RY	1,827,848
3.	VK2SG	284,900
4.	VK2DUU	247,380
5.	VK2BQS	215,760
6.	VI8HA	210,720
7.	WB5HDR	194,268
8.	VK3JI	86,216
9.	K6WZ	68,584
10.	W2KHQ	47,100
11.	DK4EC	34,552
12.	JE1NWL	20,588
13.	SM5AAY	19,308
14.	SP2UU	18,676
15.	PY2RRG	18,396
16.	VE2QO	8,019
17.	JH7IMX/2	2,588
18.	JA4IQI	1,440
19.	DF5BX	1,060
20.	JA1UTS	808

Multi Operator		
1.	VE3UR	514,688
2.	OK6DX	468,842
3.	JA6YDH	114,180
4.	JA7YFB	113,888

S.W.L.		
1.	DE1GMH	8,640
2.	DF-F20-1731652	8,448

Check Logs from VK2EG and VK3KF.
There was 30 VK stations logged during the contest, but only 8 logs were received. There were 6 ZL stations logged, but no logs were received from ZL. Approximately 300 stations were logged but it appears that only 10 per cent sent their logs in. There were 65 different countries logged, but again not all the logs were sent in. There were a number of "G" stations in the contest, but again a severe shortage of logs. It has been decided by the membership of the A.N.A.R.T.S. to rename the contest. The new name will be the A.N.A.R.T.S. World Wide RTTY Contest. Contest Manager
Bill Storer, VK2EG

1985 CQ AA Phone RESULTS

AFRICA

CANARY ISLAND					
★EA8TE	14	30	19	570	
REUNION					
★FR5DX	M	567	301	113967	
DJIBOUTI					
★J28EI	M	104	72	7488	
ZAMBIA					
★9J2YM	21	315	57	17955	

EUROPE

PORTUGAL				
★CT1TM	M	62	45	2790
WEST GERMANY				
★DF2UU	7	31	22	682
★DK6NB	14	150	64	9600
DJ6HI	14	80	35	2415
DL8AAM	14	7	5	35
★DL2GBT	28	23	15	345
★DL1PC	M	389	167	64963
DL2NBU	M	88	50	5192
DK8AX	M	62	42	2604
DK2XX	M	52	31	1612
★DF6EB	MM	260	14	37700
DK6JW	MM	163	32	5216
SPAIN				
★EA1BCK	14	52	26	1352
EA3PE	14	23	17	391
EA2BIM	14	24	3	72
★EA3AAY	M	142	83	11786
★EA5AEN	M	147	78	11466
EA3BOX	M	126	77	9702
EA7BHO	M	119	68	8092
EA5JC	M	104	63	6552
EA5BMF	M	96	61	5856
EA3ELM	M	64	53	3392
EA2AGZ	M	68	45	3060
EA5EFV	M	66	32	2112
EA3EGI	M	45	30	1350
EA1AWW	M	41	31	1271
EA7CDN	M	29	25	725
EA5FHE	M	28	19	532
EA3CVA	M	25	21	525
EA3FLR	M	16	14	224
EA6SK	M	11	10	110
IRELAND				
★EI5CL	7	8	7	56
FRANCE				
★F6KLN	14	4	3	12
★F9LM	M	95	56	5320
F6BVB	M	82	55	4510
F6DLM	M	50	41	2410
FE1WTW	M	50	36	1800
FE6CLM	M	29	22	638
ENGLAND				
★G3SJX	M	25	20	500
★G6M	MM	65	46	2990
WALES				
★GW1KGR	M	30	20	600
HUNGARY				
★HA7KPW	21	340	87	29580
★HG1XX	28	37	20	540
HA1UI	28	7	7	49
★HA3NU	M	87	65	5655
★HA6KNX	MM	172	102	17544
SWITZERLAND				
★HB9DX	14	43	43	1849
★HB9AAA	M	107	62	6634
ITALY				
★IK5BCU	3.5	30	S •	150
★I3REH	7	22	14	308
★I2TZK	14	115	56	6440
I4ZLW	14	75	30	2250
★IR5AT	21	324	97	31428
I6KYL	21	65	29	1305
IK1BHL	21	30	14	280
★I2LVN	28	11	8	88
★IK1DYU	M	77	45	3465
I4CSP	M	51	31	1581
I2VXJ	M	19	15	285
★IT9EQO	MM	163	94	15322
IK2DZN	MM	82	49	4018
SVALBARD				
★JW5VAA	14	32	5	160
NORWAY				
★LA1OEA	14	25	20	500
LA9ZV	14	17	13	221
★LA9PT	M	132	72	9504
LA2AD	M	58	37	2146
LUXEMBOURG				
★LX1HSG, LX	14	11	7	77
BURGALIA				
★LZ2QV	7	43	29	1204
★LZ2RM	14	124	54	6696
★LZ2EW	21	155	72	11160
★LZ2KIN	28	104	56	5824
★LZ1KKZ	M	83	50	4150
LZ1HP	M	46	14	644
★LZ2KTS	MM	1550	339	525501
LZ1KKI	MM	27	13	351
FINLAND				
★OH1AF	14	513	102	52326
OH6HD	14	321	86	27606
OH6YF	14	66	38	2508
OH7SQ	14	31	40	1240
★OH4MI	21	314	12	3768
OH1TD	21	53	32	1696
OH7EU	21	31	22	682
OH2BYS/6	21	21	13	273
★OH2NW	28	16	11	176
★OH1RH	M	156	437	68172
OH3UU	M	434	151	65534
OH2BJG	M	109	73	7957
OH5JJ	M	74	49	3626
OH6CD	M	65	45	2600
OH1BV	M	99	20	1980
OH1KA	M	25	16	400
CZECHOSLOVAKIA				
★OK2BQL	14	123	49	6027
★OK1JJB	14	110	50	5500
OK3YK	14	83	47	3901
OK2ABU	14	75	43	3225
OK1ORA	14	56	35	1960
OK2BPU	14	55	35	1925

1985 ALL ASIAN CONTEST RESULTS

SINGLE OPERATOR - SINGLE BAND

Band / 大陸	3.5	7	14	21	28
AF	—	—	EA8TE 570	9J2YM 17955	—
EU	UA4PFR 1330	UB5IFN 5664	OH1AF 52326	YU2RA 47866	LZ2KIM 5824
OC	—	VK6AOK 1	N6ADI/NH6 19776	YC6DPO 150800	VK2PFQ 4
NA	N6RO 2964	K6NA 36281	W6SZN 19251	—	K7SS 1971
SA	—	—	PY3BC 1891	—	—
AS	4X6DK 3808	UF6VAW 20295	UA6QBB 129672	4Z4TR 39304	RF6QAI 8470

SINGLE OPERATOR - ALL BANDS

Call / Band		3.5	7	14	21	28	Total	Score
AF	FR5DX	52/15	85/47	254/74	176/65	—	567/201	113967
EU	UA3RAR	22/7	77/37	152/49	368/92	29/18	668/203	135601
OC	AH2U	84/21	120/45	486/89	960/84	110/42	1760/281	494560
NA	K6EID	40/13	60/29	191/67	35/17	—	326/126	41076
SA	LU6ETB	2/1	78/39	121/47	201/62	8/7	410/156	63960
AS	UI8EAA	78/21	84/27	1217/82	426/50	153/39	1958/219	428802

MULTI OPERATOR

Call / Band		3.5	7	14	21	28	Total	Score
AF	—	—	—	—	—	—	—	—
EU	LZ2KTS	62/22	96/54	384/89	844/97	173/77	1599/339	528501
OC	VI6DU	18/8	106/49	279/63	634/82	—	1037/202	209474
NA	NR5M	34/11	205/49	547/92	58/27	—	844/179	151076
SA	CX7AAB	—	—	55/29	64/33	—	119/62	7378
AS	RL8PYL	140/28	182/42	1508/83	610/61	389/53	2829/267	755343

OK3CSQ	14	17	17	289
OK2KVI	14	9	6	54
★OK2ZA	21	42	29	1218
OK1AKU	21	32	28	1036
OK1AJN	21	24	20	480
OK1MJB	21	43	9	387
OK2QX	21	17	13	221
★OK1KZ	28	8	8	64
★OK1AXB	M	74	49	3626
OK1BB	M	65	45	2925
★OK3KII	MM	671	168	112728
OK2KNJ	MM	65	42	2730
BELGIUM				
★ON4DG	14	49	31	1519
★ON4BK	M	144	76	11020
DENMARK				
★OZ1IJP	14	46	29	1334
OZ1DYJ	14	28	18	504
★OZ5EV	M	127	78	9906
OZ1CFV	M	49	30	1470
NETHERLANDS				
★PA3DJC	14	86	46	3956
★PA3CEF	21	5	4	20
★PA3CZP	M	92	56	5152
PA3GER	M	37	28	1036
SWEDEN				
★SM5ARR	7	7	6	42
★SM4BVQ	14	61	36	2196
SM3CBR	14	36	23	828
SM7AIO	14	29	22	638
★SM4KV	21	78	44	3432
SM4MC	21	32	21	672
★SM5BMB	M	134	76	10184
POLAND				
★SP5DNG/6	7	18	8	144
★SP5LKM	14	206	74	15244
★SP8NR	14	97	67	6550
★SP6JZB	14	97	47	4550
SP8IXF	14	98	44	4312
SP2AYC	14	68	34	2040
SP2DKI	14	49	26	1274
SP9MRO	14	43	27	1188
SP2EXN	14	92	10	920
SP6JZG	14	68	9	612
SP7FAH	14	52	11	572
SP3JHY	14	48	10	480
SP6JOE	14	21	15	315
SP3CDR	14	29	5	145
SP9AVZ	14	20	7	140
SP3IFX	14	29	4	116
SP6JIR	14	10	7	70
SP3LPR	14	7	6	42
★SP6BFK	21	36	25	900
SP6CIK	21	30	23	874
SP1BEU	21	28	23	644
SP7DZA	21	18	12	216
SP6COZ	21	32	6	192
SP2UUU	21	6	6	36
★SP5LAI	M	87	54	4698
SP1DTG 1	M	74	47	3478
SP9MQH	M	45	31	1395
SP3IOE/3	M	26	19	494
SP6DVP	M	35	14	490
SP3LPX/3	M	14	12	168
★SP5PBE	MM	232	110	25520
SP9KOU	MM	235	78	18330
SP2IHB 2	MM	35	24	840
CORSICA				
★TK5EP	14	10	7	70
★TK/F6EYS	21	7	4	28
ROMANIA				
★YO4VZ	14	82	43	3444
YO5BRZ	14	12	8	96
★YO3AIS	21	31	8	248
YO2CMI	21	9	6	54
★YO3CD	28	26	19	494
★YO8KOD	M	215	121	26015
YO4ASV	M	154	86	13244
YO4FR	M	104	65	6565
YO2ARV	M	60	32	1920
YO4AWR	M	58	34	1708
YOUGOSLAVIA				
★YU1ABH	7	65	37	2405
★YU1EJC	14	86	45	3870
YU1ORQ	14	28	22	516
YU3HAM	14	4	3	12
★YU2RA	21	536	91	47864
YU7MGU	21	64	33	2112
★YU7ZZ	28	33	14	472
YU2LLL	28	13	10	130
YU7TW	28	13	6	78
★YU7SF	M	48	32	1536
★YU4EZC	MM	656	220	144320
YT2R	MM	636	191	121476
YT3T	MM	486	179	86994
EAST GERMANY				
★Y52ZL	7	11	7	77
★Y25HL	14	106	47	4982
★Y51YC	14	102	47	4794
Y28AL	14	66	30	2574
Y25FF/A	14	67	36	2412
Y51NL	14	52	31	1612
Y82NL	14	48	31	1488
Y32KE	14	48	30	1200
Y26LN	14	44	25	1100
Y21IC	14	36	22	792
Y28XL/A	14	15	11	165
Y36SG	14	1	1	1
★Y54XL	M	163	90	14670
Y22WD/P	M	110	57	6270
Y32ZE	M	86	53	4664
Y29WJ	M	30	20	600
Y22RK	M	27	18	486
Y51TG	M	29	8	232
Y69RF	M	11	9	99
European Russian R.S.F.S.R				
★UA4PFR	3.5	70	19	1330
UA4PMI	3.5	46	13	598
UA4LBE	3.5	42	9	378
★UA6XT	7	62	35	2170
UA4CED	7	57	31	1767
★UW1AE	14	95	46	4370
UV3MM	14	68	41	2788
UA3GEA	14	48	23	1104
RW3QA	14	9	6	54
★RW3DW	21	294	85	24990
UA6ACK	21	274	70	19180
★UA6LDX	28	47	27	1269
UA6LCA	28	33	9	297
★UA3RAR	M	668	203	135604
UA3TN	M	256	74	18944
UA3ZU	M	165	82	13530
RA1AA	M	110	55	6050
UA4NC	M	65	45	2925
★UZ4HWG	MM	1371	362	496302
UZ3SWB	MM	314	141	44274
UZ6LXU	MM	279	128	35712
UZ3DXW	MM	250	126	32508
UZ4SWM	MM	140	82	8680
UZ1AWW	MM	112	38	4256
UZ3QWM	MM	69	39	2691
RZ6AWP	MM	33	22	726
UZ4FWO	MM	30	24	720
UKRAINE				
★UB5IFN	7	118	48	5664
★RB5IZ	14	351	80	28080
RB5SB	14	234	73	17082
RB5HT	14	177	63	11351
UT4UX	14	133	51	6783
UB5EDU	14	177	47	5499
UB5JOO	14	57	32	1824
UB5CN	14	51	30	1530
UB1JDM	14	30	20	600
★RB5CB	21	55	31	1705
UB1ME	21	51	29	1479
UB5TAU	21	15	11	165
★RB4IRO	28	64	38	2496
UB5QKC	28	32	22	704
★RB5IQ	M	115	69	7935
RB5MY	M	109	51	5550
★UB3IWA	MM	1577	251	395827
UB4DXX	MM	332	122	40504
UB4VWA	MM	127	66	8255
UB4TWL	MM	61	37	2257
UB4IYU	MM	41	25	1025
BYELORUSSIA				
★UC2AAD	14	98	44	4312
★UC2OR	M	119	71	8449
★UC1AWZ	MM	75	75	3750
MOLDAVIA				
★UO5OEK	14	42	24	1008
★UO5OV	M	47	32	1504
LITHUANIA				
★UP2OQ	14	40	22	880
★UP2BJM	21	46	29	1334
★UP2BBF	M	21	16	336
★UP1BWC	MM	241	113	29493
UP1BXB	MM	75	37	2775
LATVIA				
★UQ2GLW	M	89	78	6962
UQ2GMR	M	78	45	3150
★UQ1GXX	MM	86	44	3784
ESTONIA				
★UR2RER	3.5	28	8	224
★UR1RWW	M	243	121	29403
★UR1RWX	MM	215	101	21715

OCEANIA

PHILIPPINES				
★DV1TV	M	536	143	76648
K4YT/DU1	M	159	66	10494
GUAM				
★AH2U	M	1760	281	494560
HAWAII				
★N6ADI/NH6	14	309	64	19776
AH6EK	14	41	20	820
★AH6AZ	M	921	143	131703
KH6IJ	M	26	18	468
KH6CP	M	26	16	416
AUSTRALIA				
★VK6AOK	7	1	1	1
★VI2PS	14	96	36	3648
★VK2XT	21	615	73	44895
VK2KPF	21	77	39	3003
VK5NOD	21	72	35	2520
VI2PWS	21	36	22	770
VK4NAS	21	15	11	165
★VK2PFQ	28	3	2	6
★VK2APK	M	243	117	28431
VK2DLB	M	211	89	18779
VK3DVT	M	42	25	1050
VK2BFC	M	52	1	52
★VK6DU	MM	1837	282	518474
INDONESIA				
★YB6PR	14	30	22	836
★YC6DPO	21	1508	100	150800
YC6DNK	21	1633	92	150236
YC6EMJ	21	1097	80	95853
YC6VCE	21	1014	86	87204
YC6LD	21	705	85	59925
YC5NOP	21	630	31	13398
★YB6ZDB	MM	373	126	46998

NORTH AMERICA

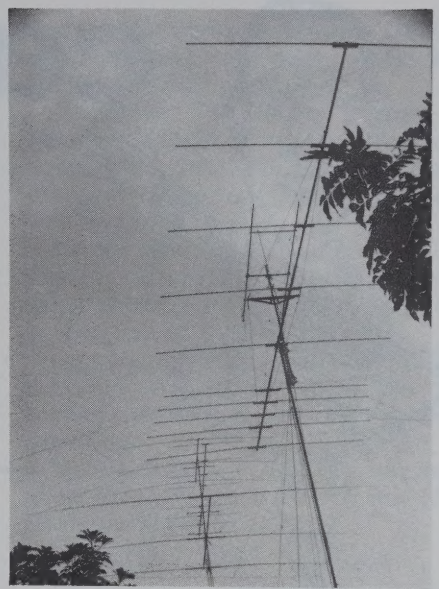
DOMINICAN REP				
★HI6A	14	110	44	6840
CANADA				
★VE3XN	14	196	83	16388
VE2AEJ/3	14	22	17	374
VE1CBF	14	15	14	210
UNITED NATIONS				
★4U1UN	MM	87	31	1767
COSTA RICA				
★TI2CCC	14	46	24	1104
U.S.A.				
★N6RO	3.5	114	26	2964
★K6NA	7	497	73	36281
★W6SZN	14	279	60	18251
★KM1R	14	219	70	15330
★K3EJ/4	14	229	61	14579
WA6VNR	14	210	58	12780
W6BH	14	177	69	12213
K1RAI	14	211	55	11605
★K9ZO	14	180	53	9954
★NB2P	14	174	57	9918
★NN7L	14	128	43	5504
W6OK	14	130	30	4940
★W8EX	14	87	42	3654
W9MP	14	82	40	3280
NG2X	14	87	33	2871
★W3BGN	14	60	36	2160
WA8YTM	14	60	36	2160
WA7KLK	14	58	32	1856
N4MM	14	52	34	1768
WA3DSH	14	44	28	1232
KR1R	14	40	25	1000
W1QV	14	28	21	588
KW2J	14	27	19	513
KA7FEF	14	14	12	192
★K7SS	28	73	27	1971
★K6EID	M	326	126	41076
★K3ZO	M	342	101	34542
★W9SE	M	261	97	25317
★W7ND	M	306	81	24786
★WD8IXE	M	180	68	12240
★K1KI	M	161	59	9499
★W2FCR	M	129	51	6579
WA6FGV	M	66	45	2970
KA2BBZ	M	68	41	2788
★NR5M	MM	844	179	151076
★KM6U	MM	53	4	212

SOUTH AMERICA

URUGUAY				
★CX3CX	M	77	41	3157
CX3BH	M	33	24	792
★CX7AAB	MM	119	62	7378
ARGENTINA				
★LU8ESU	14	31	25	775
★LU6ETB	M	410	156	63960
BRAZIL				
★PY3DC	14	61	31	1891
★PP2ZDD	M	71	30	2760
PP5OW	M	41	29	1189
PT2ACC	M	29	18	522
VENEZUELA				
★YV5JEA	14	23	16	368

ASIA

CHINA				
★BT4RJU	MM	27	6	162
BT1HHL	MM	1	1	1
KOREA				
★HL1APR	14	25	12	300
★HL2AMO	21	40	16	640
HL1ABR	21	36	9	315
★HL1QT	M	20	11	220
THAILAND				
★HS6A	MM	822	142	116724
MONGOLIA				
★JT1AO	14	40	17	680
★JT1KAA	M	125	52	6500
JT1KAI	M	125	45	5625
JT1DG	M	13	8	104
JORDAN				
★JY9MG	M	726	109	79134
INDIA				
★VU2DVP	7	75	33	2475
SRI LANKA				
★4S6AA	MM	650	111	72150
ISRAEL				
★4X6DK	3.5	136	28	3808
★4Z1TR	21	570	68	38304
★4Z1AA	MM	1720	161	276200
Asiatic R.S.F.S.R.				
★RA9YD	3.5	98	19	1862
UW9QA	3.5	80	15	1200
UA6FDX	3.5	28	6	168
★UA9FM	7	77	24	1848
UA9QA	7	53	19	1007
★UA6QBB	14	1801	72	129672
UA6SAU	14	1069	65	69485
RW9UR	14	725	58	42050
UA9YF	14	489	49	23961
UA9HTT	14	335	39	13065
UV9FR	14	102	31	3162
UA9FGJ	14	104	30	3120
UA6FEP	14	106	20	2120
UA9WFJ	14	63	19	1197
UW6MF	14	42	15	630
★UW9WB	21	46	16	736
★UA9CRR	28	192	29	5568
RA9AKM	28	163	27	4401
UA9AKO	28	137	26	3562
RA9SUV	28	36	12	432
UA9YP	28	27	10	270
RA9UAD	28	8	5	40
★UV9FM	M	1908	172	328176
UA9YX	M	1243	139	172777
UA6TO	M	1154	128	147712
UA9CB	M	507	94	47658
UW9YI	M	137	48	6576
UA6ZDD	M	177	28	4956
UA9WDM	M	29	10	290
UW6CM	M	13	9	117
★UZ9CWW	MM	2408	164	394912
UZ9CWB	MM	1516	168	254688
UZ9QWW	MM	1213	151	183163
UZ9XWW	MM	824	87	71688
UZ6AWB	MM	752	83	62416
UZ9OWD	MM	548	81	43740
UZ6LWX	MM	628	68	42704
UZ9AWH	MM	383	87	33321
UZ9CYP	MM	143	30	4290
UZ9XWH	MM	120	31	3720
AZERBAIJAN				
★UD6DEA	28	96	24	2304
GEORGIA				
★UF6VAW	7	300	55	28295
★RF6FL	14	4	4	16
★RF6FB	21	14	10	140
★RF6QAI	28	242	35	8470
TURKMENISTAN				
★UH8EAC	21	702	58	40716
★UH8EAA	M	1958	219	428802
TADZHIKISTAN				
★UJ8JJ	M	30	22	660
KAZAKHSTAN				
★RL9CE	21	40	16	640
UL7TT	21	10	6	60
★RL8PYL	MM	2829	267	755343
UL8AWA	MM	1907	207	411369
UL8RWE	MM	810	94	68892
KIRGHIZIA				
★UM8MO	14	1242	71	88182
★UM8MIG	28	95	24	2280
UM8MFJ	28	9	5	45
★UM9MWO	MM	242	78	18876
JAPAN				
★JS1JRZ	3.5	96	16	1536C
JH8DYJ	3.5	4	1	4
★JA2QPY	7	10	7	70B
JJ1AJT	7	9	3	27
JK1RJQ	7	6	3	18
JM3CNN	7	2	2	4
JA6GZ	7	1	1	1
★JH1AEP	14	1321	73	96433A
★JK1MAZ	14	1284	64	82176C
★JH1XYR	14	920	63	57960A
★JR6PGB	14	775	73	56575B
★JH7QKJ	14	711	55	39105A
JE6VVM	14	374	46	17224
JP1PUH	14	280	43	12384
JF1SEK	14	193	38	7334
JR1DVB	14	246	24	5904
JA9EYI	14	162	36	5832
JA1AO	14	184	29	5336



Wawan, YC2CGW has bilt this 10 element 15 m killer antenna. Now if only sunspots opened the bands.

Akito Nagi, JA5DQH, NN7S operated from Macao using XX9XX call sign, concentrating on 160 m band. He worked many DX stations and achieved WAC award on 160 m.

His address is: 2552-28 Ishii, Ishii-cho, Myozai-gun, Tukushima-ken, 779-32, Japan.

THREE OF AMATEUR RADIOS BEST KEPT SECRETS

KC-1

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CONTEST RULES

FRANK ANZALONE, W1WY
CQ Magazine

Calendar of Events

*	Jan.	24-26	**CQ WW 160M CW Contest**
*	Jan.	25-26	French CW Contest
	Jan.	25-26	UBA CW Trophy Contest
	Feb.	1-2	Vermont QSO Party
	Feb.	1-2	RSGB 7 MHz Phone Contest
*	Feb.	1-3	New Hampshire QSO Party
	Feb.	2	ARCI QRP Winter SSB Sprint
	Feb.	8-9	QCWA CW QSO Party
	Feb.	8-9	YL-OM Phone Contest
	Feb.	8-9	YL-ISSB Phone Contest
	Feb.	8-9	Dutch "PACC" Contest
	Feb.	15-16	ARRL DX CW Contest
	Feb.	**21-23**	**CQ WW 160M SSB Contest**
	Feb.	22	RTTY Journal Contest
	Feb.	22-23	French Phone Contest
	Feb.	22-23	RSGB 7 MHz CW Contest
	Feb.	22-23	YL-OM CW Contest
	Feb.	22-23	UBA SSB Trophy Contest
	Feb.	22-23	Alabama QSO Party
	Mar.	1-2	ARRL DX Phone Contest
	Mar.	8-9	QCWA Phone QSO Party
	Mar.	8-9	RSGB Commonwealth
	Mar.	9-10	Wisconsin QSO Party
	Mar.	15-16	Bermuda Contest
	Mar.	15-16	YL-ISSB CW Contest
	Mar.	22-24	BARTG Spring RTTY
	Mar.	**29-30**	**CQ WW WPX SSB Contest**

* *Covered last month.*

UBA Trophy Contest

CW: Jan. 25–26 SSB: Feb. 22–23
0600Z Saturday to 1800Z Sunday

This is an annual affair sponsored by the Union of Belgian Amateurs. Participation is dominated by the Europeans. There were no stateside entries in the 1985 contest.

All five bands, 10–80, can be used, but are divided into the following classes:

A. Single operator, 40 and 80 meters only, 6 hours—2 hours on Sunday, 0900 to 1100Z, other 4 hours free choice.

B. Single operator, 40 and 80, only 12 hours.

C. Single operator, all bands, only 24 hours.

D. Multi-operator, all bands, full 36 hours.

SWL's—A, B, and C as above.

Exchange: RS(T) and QSO serial number. Belgian stations will include their province abbreviation.

Points: ON and ON Forces in Germany, 10 points per contact. QSO's with one of French countries, 1 point.

Multiplier: Each Belgian province plus a BSD/FBA worked on each band (maximum of 10 per band).

Final Score: Total QSO points times the sum of multipliers from each band.

Awards: Certificates to the top scorers in each class for each country.

Use a separate sheet for each band and a summary sheet showing the scoring and other essential information, including the usual signed declaration.

Mailing deadline for CW entries is March 1st, and April 1st for SSB.

They go to: UBA HF Contest Committee, Att: Galicia Jan, ON6JG, Oude Gendarmeriestratt 62, B-3100 Heist op dēn Berg, Belgium.

RSGB 7 MHz Contest

Phone: Feb. 1–2 CW: Feb. 22–23
1200Z Sat. to 0900Z Sun.

Rules are the same as those used last year. Only single operator entries will be recognized. The following rules are for stations other than the British Isles.

Bands: Phone—7.04 to 7.10. C.W.—7.00 to 7.03. (B.I. stations please note that this will require split frequency on phone for U.S. stations.)

Exchange: RS(T) plus a three digit QSO number starting with 001.

Scoring: Stations in Europe score 5 points for each B.I. contact. Those outside Europe score 15 points per contact.

Multiplier: One for each different British Isle country prefix worked (G2, GC3, GD4, GI6, GJ8, GM3, GU5, GW8, etc.), maximum of 49 possible. No credit for GB prefix.

Final Score: Total QSO points times the country prefix multiplier worked.

Awards: Certificates will be awarded to the first, second, and third place winners in the British Isles, Europe, and non-Europe in each section of the contest.

Include a summary sheet showing the scoring and a list of the country prefixes worked, and the usual signed declaration that all rules and regulations have been observed.

There is also an SWL section with the scoring same as above. Overseas listeners log B.I. stations only. Record the call as well as the serial number sent. The call sign of the station being worked may only be repeated once in every three contacts logged unless it's a new multiplier.

Unmarked duplicate contacts will be penalized at ten times the number claimed. Logs containing in excess of five unmarked duplicates will be automatically disqualified.

Phone entries must be received by March 31st and CW by April 21st. This year they go to: RSGB HF Contests Committee, P.O. Box 73, Lichfield, Staff. WS13 6UJ England.

Vermont QSO Party

0001Z Sat. to 2400Z Sun., Feb. 1–2

This event is again being sponsored by the Central Vermont ARC. The same station may be worked three times per band—once each on phone, CW, and RTTY—for QSO points.

Exchange: RS(T) and QTH. County for VT; state, province, or DX country for others.

Scoring: One point per phone QSO; 5 points if on CW or RTTY. VT stations multiply total by (VT counties + states + VE provinces + DX countries) worked. All others use VT counties for their multiplier (maximum of 14). Work the club station W1BD and add 20 bonus points to your score. VT Counties: AN, BN, CA, CN, EX, FN, GI, OG, OL, RU, WA, WM, WR.

Frequencies: Phone—3910, 7230, 14260, 14320, 21360, 28570, 50110, 144.2 (no repeaters). CW—3540, 3720, 7040, 7120, 14040, 21040, 21140, 28040. RTTY—3620 and 90 kHz from lower edge of other bands.

Awards: Certificates to the top-scoring station in each state, VE province, and DX country, and each Vermont station submitting a log. There is an annual plaque to the highest scoring Vermont station.

The W/VT Award is available to sta-

tions working 13 of the 14 Vermont counties.

Official log forms are available by sending a large SASE to WA1PDN.

Mailing deadline for party entries is March 1st to: D. Loverin, WA1PDN, 50 Liberty Street, Montpelier, VT 05602.

ARCI QRP Winter SSB Sprint

2000Z to 2400Z Sun., Feb. 2

Rules are exactly the same as for the SSB September 7th Sprint. Rules were in the September 1985 issue. Logs go to: Eugene Smity, KA5NLY, P.O Box 55010, Little Rock, AR 72225.

YL-OM Contest

Phone: Feb. 8–9 CW: Feb. 22–23
1800Z Sat. to 1800Z Sun.

It's the YL's working the OM's in this annual activity organized by the YLRL. All bands may be used, but cross-band contacts or contacts with stations on net frequencies do not count.

Phone and CW are separate contests and require separate logs. The same station may be worked once only regardless of band.

Exchange: QSO no., RS(T), and ARRL section or DX country. (See *QST* for sections list.)

Scoring: Each QSO is worth 1 point. Multiply total by number of ARRL sections and DX countries worked for final score.

There is also a power multiplier of 1.25 for stations running 150 watts or less on CW, and 300 watts PEP on SSB. Multiply your final score by the above factor if you qualify.

There is a penalty of three contacts for each duplicate contact removed from the log by the contest committee.

Frequencies: CW—3555, 7055, 14055, 21195, 28195. SSB—3955, 7255, 14295, 21395, 28595. Plus or minus 15 kHz.

Awards: First-place cups to both YL and OM winners in each contest. Second and third place winners will receive certificates. The top scorers in each U.S. and VE call district and each DX country will also receive certificates.

All entries must be mailed by March 10th. This year they go to: Mary Lou Brown, NM7N, 504 Channel View Drive, Anacortes, WA 98221.

QCWA QSO Party

C.W.: Feb. 8–9 S.S.B.: March 8–9
0001Z Sat. to 2400Z Sun.

This is the 29th annual QSO Party for the Quarter Century Wireless Association. It's a fun party to renew old friendships and to meet new friends.

Rules are the same as those used last year. CW and SSB are separate activities and require separate log entries. The same member may be contacted on each band for QSO points, but the chapter and "AL" multiplier count once only.

Exchange: QSO number, name, chapter (name or number), and state. If no chapter affiliation use "at large," or "AL."

Points: One point for each QCWA member worked on each band.

Multiplier: Each new chapter and one "AL" contacted, counted once only.

Score: Total number of QSOs multiplied by the total number of chapters plus one "AL" contact worked (well over 150 at last count).

Frequencies: CW—3545, 7045, 14045, 21055, 28055. SSB—3915, 7245, 14295, 21365, 28615. Plus or minus 15 kHz. Also 160 meters and 6 and 2 meters simplex.

Awards: Plaques to the top scorer in each party. Party QSO's can be applied to the many QCWA awards. Make your request on the summary sheet of your entry.

The standard QCWA log forms have 20 contacts to the page. If you prepare your own, have columns for the time in UTC, station worked, QSO number sent and received, name, chapter, and state. *(A column indicating the band and the multiplier the first time it is worked would be helpful. Using a separate log sheet for each band would also be helpful.—ed.)*

Submit your entry right after each party, but no later than March 24th. CW logs go to: Edward Everett, W1ALE, 162 Centre St., Concord, NH 03301. SSB logs go to: Carl Breuning, N1CB, 54 Myrtle St., Newport, NH 03773.

YL ISSB QSO Party

Phone: Feb. 8–9 CW: March 15–16
0001Z Saturday to 2359Z Sunday

The party is open to all, but the emphasis is on membership participation.

Categories: Single operator, DX-W/K partners, and YL-OM teams.

Exchange: Signal report, state, province, or country; and name. Members will include their ISSB number and DX-W/K partner.

Points: Three points for two-way member contacts within the same continent, 6 points if in different continents. One point for non-member contacts.

Multiplier: Only member stations count as multipliers. One for each of the following: DX-W/K partners, YL-OM team, each US state, VE province, and DX country. And two for contacts between DX-W/K partners using input power under 250 watts throughout party.

Frequencies: The General portions of the phone and CW bands. *Note:* Avoid net frequencies, 14313, 14332, and 14336, etc. Check 40 and 80 meters on the hour. VHF and UHF simplex only.

Awards: Special certificates to overall winners in each category. Regular certificates to winners in each US state, VE province, and DX country.

Logs should be set up as outlined in the exchange. A summary sheet with the scoring and other essential information is desirable.

Mailing deadline is April 30th and logs go to: Bill Early, WA9AEA, P.O Box 401, McHenry, IL 60050-0401.

Dutch "PACC" Contest

1200Z Sat. to 1200Z Sun., Feb. 8–9

It's the world working The Netherlands on all six bands, 1.8 through 29.7 MHz, in the band sections recommended for contest operation by the IARU. The same station may be worked on each band, but on one mode only, phone or CW, for QSO and multiplier credit.

Categories: Single operator, multi-operator, and SWL.

Exchange: RS(T) plus a QSO number starting with 001. Dutch stations will add two letters to identify their province. There are 12 provinces: DR, FR, GD, GR, LB, NB, NH, OV, UT, YP, ZH, and ZL.

Scoring: Each QSO with a PA/PB/PI station counts one point. DX stations determine their multiplier by the number of provinces worked on each band (maximum of 72).

Final Score: Total number of QSO's times the number of provinces worked on each band.

Awards: Certificates to the top scoring station in each category in each country and call areas of JA, LU, PY, UA9/0, VE/VO, VK, W/K, ZL, and ZS. Also second and third place awards if returns justify.

SWL's must log the call of the Dutch station as well as the station being worked and both serial numbers. Scoring same as above.

Indicate the multiplier in a separate column in your log only the first time it is worked on each band. Include a summary sheet showing the scoring, your name and address in block letters, and the usual signed declaration.

Mailing deadline is March 31st to: PACC Contest, Att: F. Th. Oosthoek, PA0INA, P.O. Box 499, 4600 AL Bergen Zoom, The Netherlands.

ARRL International DX Contest

C.W.: Feb. 15–16 Phone: March 1–2
0000Z Saturday to 2400Z Sunday

Rules are the same as last year. However, I strongly recommend that you study the announcement in the December issue of *QST* for more details. Also send a large SASE (2 IRC's for DX) for sample log and entry forms.

All bands may be used, 1.8 through 28 MHz, but not 10 MHz. Aeronautical or maritime mobile stations cannot be worked for contest credit. Following is a brief outline.

Categories: Single operator, both single and all band. Multi-operator, one transmitter and two transmitters. Also multi-operator, multi-transmitter. Also QRP, all band only. Multi one and two transmitter stations must remain on a band at least 10 minutes once a contact is made. Multi-transmitter stations no limit, but only one signal per band.

Exchange: RS(T) and state or province for W/VE; RS(T) and power input for DX stations (three-digit number).

QSO points: W/VE stations earn three points for each DX contact. DX get three points for each W/VE contact.

Multiplier: Each DXCC country worked on each band for W/VE's. DX stations use US states (48) and VE districts VE1–8, plus VO and VY1 for their multiplier (10). (Maximum multiplier of 58 per band.)

Final Score: Total QSO points times the sum of the multiplier from each band. Entries with 500 or more QSO's must include a QSO check sheet.

Awards: Certificates given in each category, in each country, and in each ARRL section, plus a wide selection of plaques. Also certificates to DX stations making over 500 QSO's.

Disqualification regulations will be strictly enforced and are listed in the official rules. Mailing deadline for all entries is April 1st, and they go to: ARRL DX Contest, 225 Main Street, Newington, CT 06111.

RTTY Journal Contest

0000Z to 2400Z Sun., Feb. 22

This is the fifth RTTY contest sponsored by the RTTY Journal in conjunction with *73 Magazine*.

The same station may be worked once on each band. Single operator stations are limited to 16 hours of operation. Multi-operators may operate the full 24 hours. Off times must be at least 30 minutes each and must be indicated in your log.

Classes: Single operator and multi-operator, single transmitter. Single and all band, 10–80 meters.

Exchange: RST and state or province for the U.S. and Canada. Others RST and a consecutive QSO number.

Scoring: Five points for contacts with Ws and VEs; 10 points for all other contacts.

One (1) multiplier point for each U.S. state (48), VE prov./terr., and DX country worked on each band.

Final Score: Total QSO points times the sum of the multipliers from each band.

Awards: Will be issued in each class to the winners in each U.S. call area, VE prov./terr., and DX country (minimum of 25 QSOs to be eligible).

Disqualification: Taking credit for duplicate contacts in excess of 2% of the total, and other discrepancies will be deemed grounds for disqualification.

Use a separate log sheet for each band, a dupe and summary sheet, and a multiplier check sheet. Indicate equipment and power used.

Contestants are requested to send a large SASE for official forms and final results. Mailing deadline for all entries is March 22nd to: The RTTY Journal, 1155 Arden Drive, Encinitas, CA 92024.

CQ WW 160 Meter SSB Contest

2200Z Fri. to 1600Z Sun., Feb. 21–23

Just a reminder that our 160 Meter S.S.B. Contest will be coming up the last weekend of this month. Extensive coverage has been given to this event with complete rules appearing in the October 1985 issue. There are no changes from last year's format.

Exchange: Signal report and QTH (no QSO serial number).

Scoring: Contacts with stations within own country count two points; with stations in other countries but the same continent, five points; with stations in other continents, ten points.

The multiplier remains the same: each US state (48), Canadian areas (13), and DX country. (US and Canada are not country multipliers.)

It is strongly requested that the "DX Window," 1825–1830, be kept free from W/K and VE/VO activity. Work the DX split frequency. (KP4 and KV4 should also observe this request.)

Mailing deadline for last month's CW Contest is February 28th. This month's SSB Contest's deadline is March 31st. Send them to: Don McClenon, N4IN, 3075 Florida Ave., Melbourne, FL 32904. Of course, you can always use the *CQ* address: 76 N. Broadway, Hicksville, NY 11801. (Please indicate CW or SSB on the envelope.)

Alabama QSO Party

1600Z Sat. to 2300Z Sun., Feb. 22–23

The Birmingham ARC has picked up this party after a year's absence and plans to generate activity from all 67 Alabama counties.

The same station can be worked on each band and mode, and mobiles and portables from each county change.

Exchange: RS(T) and QTH. County for Alabama; state, province, or country for others.

Scoring: Two points for phone contacts, 3 points for CW. Alabama stations multiply total QSO points by sum of US states, VE provinces, AL counties, and DX countries worked. Others use AL counties for their multiplier (maximum of 67).

There is a bonus multiplier of 1.5 for stations using 200 watts or less, and also 1.5 for stations using noncommercial power (mobiles excluded).

Mobiles can add 500 bonus points for each county from which 10 or more QSOs are made.

Frequencies: CW—1810 and 50 kHz from the bottom of each band. Phone—3900, 7260, 14300, 21360, 28600, 50.110, 144.20, 146.52. Novice—10 kHz from low end of each Novice band.

Awards: Certificates to top scorers in each Alabama county, and each US state, VE province, and DX country. Also to top Novice and Tech scorers both in and out of state. Trophies to the overall out-of-state, Alabama fixed/portable, and mobile winners.

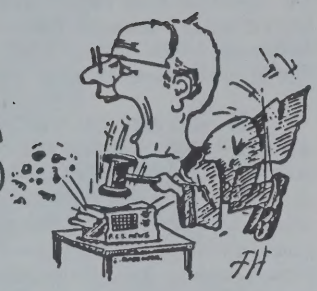
Mailing deadline is March 30th to: Bill Levey, WA4FAT, 3629 Dabney Drive, Birmingham, AL 35243. Include an SASE for a copy of the results.

Most state QSO parties still refer to the Canadian multiplier as provinces. Taken literally, that would only add up to a multiplier of 10, where in fact a multiplier of 13 is available. VE8 and VY1 are territories, and VO2 is part of the province of Newfoundland but counts as a separate multiplier, therefore making a total multiplier of 13. If Canadian areas are to be used as multipliers, their identity should be more clearly defined (provinces plus VE8, VY1, and VO2, or provinces and call areas).

Final arrangements for the Tom Peruzzi, W4BVV Memorial Plaque (World-Wide Contest, European All Band Phone) have been completed. Yours truly, W1WY, is donating the 1984 award. The 1985 and future awards will be donated by the Potomac Valley Radio Club.

73 for this time, Frank, W1WY

FCC NEWS



BILL GRENFELL, W4GF

7216 Valleycrest Blvd. Annandale, VA, 22003

THE OPERATION OF AMATEUR STATIONS IN THE 1900-2000 kHz HALF OF THE 160 METER BAND MUST NOT CAUSE HARMFUL INTERFERENCE TO THE RADIOLOCATION STATIONS. (FCC Report and Order, PR Docket 84-874, 10/28/85; effective 12/09/85). The earliest that existing conventional radiolocation systems can apply for operation in the 1900-2000 kHz band is 07/01/87, and the earliest for new conventional systems is 07/01/88. The new spread-spectrum radiolocation systems were permitted to apply for access to the 1900-2000 kHz band beginning 12/15/85. Authorization of the wide band systems is on a secondary basis to the conventional systems and is not expected to cause interference to, or receive interference from the operation of amateur stations. All of this shuffle is being carried out for the sake of adding some ten more AM broadcast channels between 1605 and 1705 kHz and to provide a place (1900-2000 kHz) for out-moded radiolocation systems displaced thereby!

THE FCC HAS DENIED THE REQUEST OF THE ARRL TO STAY FCC'S PR DOCKET 85-21 ACTION DELETING THE REQUIREMENT THAT CANDIDATES FAILING AN AMATEUR OPERATOR LICENSE EXAMINATION HAD TO WAIT 30 DAYS BEFORE BEING ELIGIBLE TO RETAKE THE EXAM. (See FCC News for the last two months for more detail). The Rule amendment became effective 11/08/85. After a flaw was brought to its attention by ARRL, FCC revised its July 1985 version of PRB Bulletin 1035A immediately to "...instruct a volunteer examiner giving Novice examinations not to use the same questions or the same telegraphy test when retesting an applicant."

ARRL ADHERES TO THE PRINCIPLE THAT THE FCC, NOT VOLUNTEER-EXAMINER COORDINATORS, SHOULD RETAIN RESPONSIBILITY FOR ALL AMATEUR RADIO EXAMINATION QUESTION POOLS. (ARRL Letter, 11/07/85, concerning PR Docket 85-196 Notice of Proposed Rule Making). "It is questionable whether the delegation of authority to maintain question pools..is statutorially permitted..." "Assigning VECs the responsibility for maintaining question pools... would be a step toward allowing 'shopping for the easiest examination." "If VEs are permitted to create the examinations, it would be possible for them to teach to the test." "The advantage of the present system is that no one in the field knows the contents of a particular examination until shortly before the test date." "...There is an ample number of VECs to create (examinations from the question pool." "Asking (VEs) to prepare examinations...is more of a burden than is advisable." "VECs, but not VEs, should be authorized to prepare individual examinations from the Commission-maintained pool."

SENATE BILL S-1667 AND HOUSE BILL H.R. 3378 AIM TO BROADEN THE DEFINITIONS OF PROHIBITED PRACTICES, AND, OF PROTECTED COMMUNICATIONS TO INCLUDE THE FOLLOWING: "...any transmission of signs, signals, writing, images, sounds, data or intelligence of any nature in whole or in part by a wire, radio, electromagnetic, or photoelectric system that affects foreign or interstate commerce." Pending in Congress in mid-September, the Electronic Communications Privacy Act of 1985 would amend Title 18 of the U.S. Code with respect to unlawful interception of wire and wireless electronic communication, authorizing the recovery of civil damages from, and introducing stiff penalties for computer crimes and destructive "hacking." Licensed Amateur Radio and CB transmissions are listed among 'unprotected' communications..." (ARRL Letter, 11/07/85).

FCC HAS RECEIVED A PETITION TO AMEND PART 15 OF THE COMMISSION'S RULES TO ALLOW UNLICENSED VIDEO TRANSMISSIONS IN THE 902-928 MHz BAND. "Stations in the amateur service must tolerate any interference from industrial, scientific and medical (ISM) devices, AVM (Automatic Vehicle Monitoring systems and the operations of Government stations authorized in this band." The petitioner states that his device would be used for "...broadcasting a (low power) video signal from the home video cassette recorder (VCR) to a TV in a remote location(s) (i.e., another room)." The petitioner's interest is in "potential involvement with a company whose business would be to market the proposed devices..." (ARRL Letter, 11/07/85). Imagine what the unrestricted power r.f. radiations from those ISM devices would do to his video converter receiver!

A PETITION FILED WITH FCC REQUESTS CREATION OF A "PUBLIC DIGITAL RADIO SERVICE" FOR OWNERS OF PERSONAL COMPUTERS WHICH WOULD BE ALLOCATED A SEGMENT, 52-54 MHz, AMATEUR BAND. A license would not be required for operation in the Service. Filed by Donald Stoner, the new radio service would consist of an "infinite" number of local networks linked together into a national packet radio network. He referred to the rejection in Docket 83-28 of the idea of a no-code amateur license and maintained that its deposition of the docket left open the possibility that the Commission would consider some other type of radio service for no-code intercommunication between groups such as the users of personal computers.

INTERFERENCE RADIATED FROM ULTRASONIC PEST CONTROL DEVICES WHICH MAY RANGE FROM 20 TO 470 MHz CAN BE SUBSTANTIALLY REDUCED. "FCC staff have determined that a minor technical change to ultrasonic pest control devices would substantially reduce their electromagnetic emissions..." Additional information may be obtained form Joe Husnay at (301) 725-1585 at the FCC Laboratory. (ARRL Letter, 11/07/85).

AMATEUR OPERATING RECIPROCITY WITH JAPAN IS BASED UPON THE UNDERSTANDING THAT THE JAPANESE "TELEPHONE CLASS" WILL OPERATE IN THE U.S. ONLY ON AMATEUR FREQUENCIES ABOVE 30 MHz. That class is an entry-level class of Japanese amateur licensees who have not taken a code test. The International Telecommunication Union's Radio Regulations state that a code test is required for amateurs operating on frequencies below 30 MHz. (ARRL, W1VED) A LOW

POWER TV BROADCAST STATION IN COLUMBUS OHIO WHICH HAD BEEN VISUALLY IDENTIFYING AS W8BV HAS FINALLY CHANGED ITS VIDEO LOGO TO W08BV AFTER A COMPLAINT WAS FILED WITH FCC. However, the zero after the "W" in the "corrected" logo looks more like a letter than a numeral and therefore, it still looks like an amateur station call sign.

USING AN AMATEUR RADIO STATION FOR FORWARDING ORDINARY WEATHER REPORTS FOR USE IN ANY BROADCAST CONTEXT WOULD CONTINUE TO BE EXPRESSLY PROHIBITED, FCC WROTE IN A 11/08/85 LETTER TO THE NATIONAL WEATHER SERVICE. The Commission was referring to its BC Docket 79-47 Report and Order adopted 06/07/85. Quotations from the letter follow: "In the same document, the Commission declared that emergency communications would be excepted from such prohibition and that a rule of reason would be applied when interpreting this emergency exception. Thus there was no intent to disturb the Skywarn program of the National Weather Service which has a long tradition of minimizing loss of life and property when severe weather threatens." Two "...filings request that the Commission clarify the present definition of emergency communications. Skywarn program may continue to function as it has in the past, pending the Commission's action on reconsideration of the Report and Order." In the letter, FCC noted that Skywarn "...uses Amateur radio operators in the field to provide information to central points. The system is activated only when the Weather Service determines that a threat of severe, damaging weather exists." The letter concludes with a recommendation that the possibility of use of government frequencies for the Skywarn program, similar to the MARS, be explored. (ARRL)

THE REPORT IN LAST MONTH'S FCC NEWS OF THE SEIZURE BY FCC'S SAN FRANCISCO OF OVER $30,000 WORTH OF ILLEGAL ELECTRONIC EQUIPMENT FAILED TO INCLUDE RED MONEY COMMUNICATIONS OF FRESNO, IN ADDITION TO DOC HOLIDAY COMMUNICATIONS, AS ONE OF THE CB OUTLETS RAIDED.

VOLUNTEER EXAMINATION COORDINATORS AND VOLUNTEER EXAMINERS DO NOT HAVE AUTHORITY TO GRANT WAIVERS OF THE RULES FOR ANY REASON advises FCC's Ray Kowalski in a 11/15/85 letter. "VECs cannot be empowered to grant or deny waivers because this agency would be remiss in fulfilling its statutory obligations if it were to delegate away powers that the Congress had specifically bestowed upon it." Mr. Kowalski is Chief of FCC's Private Radio Bureau's Special Services Division. (W5YI Report, 12/01/85)

W5YI REPORTS (12/01/85) THAT THE "THE FCC HAS DENIED AND DISMISSED (HIS) PROPOSAL TO PROVIDE FOR TEMPORARY OPERATING AUTHORITY FOR THE NOVICE CLASS OPERATOR." He had proposed that a person who had passed the examination be allowed to use his examiner's call with a "/KN" identifier until the new Novice license arrives - about 30 days. "...No person who is not already licensed and whose qualifications have not been reviewed and approved by the Commission is granted temporary operating authority," advised FCC's Private Radio Bureau Chief, Robert S. Foosner in his 11/13/85 letter denying Maia's request.

FCC FORM 610 CAN BE DUPLICATED AND USED AS LONG AS THE COPIES ARE EXACT DUPLICATES, INCLUDING PAPER SIZE, WEIGHT, COLOR, ETC. The color of present 610s is buff. Only the June, 1984 and later editions may be used in the VEC System. For a supply of 610s write: FCC - General Radio Branch; Attention: Larry Weikert; P.O. Box 1020; Gettysburg, PA 17325. "He'll get them right out to you." (W5YI Report)

THE MATTER OF THE PETITION TO PROVIDE FOR AMATEUR USE OF F8E EMISSION IN THE 902-928 MHz BAND HAS BEEN IDENTIFIED AS "RM-5208." The time provided for original and reply comments expired before this month's FCC NEWS was published. However, there should be plenty of time allowed for comment if the Commission is persuaded to propose such an amendment to the amateur rules.

AS OF OCTOBER 29, 1985 THE NUMBER OF AMATEUR OPERATOR LICENSEES IN EACH CLASS WERE: Extra - 38,168; Advanced - 97,864; General - 117,268; Technician - 83,361; Novice - 76,466; Total - 413,127. (W4GF)

DISH OWNERS SCRAMBLE

If you own a home satellite TVRO, you might be without much to watch within the next six months. While Congress slowly debates the issues raised in Senate bill S - 1618, which is aimed at assuring home satellite dish owners access to signal on those birds.

The videophile magazine Video Review reports in its December, 1985 issue that Home Box Office will be fully encrypted on all of its satellite feeds on or before January 15, 1986. HBO has announced its intention to use the VideoCypher II encoding/decoding system.

Meanwhile, other industry sources indicate that a number of encoded program supply consortiums are in the offing, each of which is interested in using a different scrambling system. Topping the list is C-Mac, which is an all-digital system, but one where the cost of decoding equipment would be prohibitive to the home TVRO owner. C-Mac does offer the advantage of handling a much higher density of data on a single satellite transponder than any analog method developed to date. It also insures that only those intended to receive C-Mac transmissions would be able to do so.

Look for one of the major scrambling consortiums to be made up totally of religious telecasters who are tired of having cable systems delay their rogramming by unauthorized tape recording. This has been hurting fund raising efforts for many religious telecasters and is the reason that they are openly at the forefront of the move to scramble signals on the birds.

Also be aware that the pay view industry is looking at a more secure alternative to satellite transmission. It is known that many are eyeing the developing AT&T national fiber optic terrestrial transmission network as a way to totally curb piracy through direct signal delivery to a CATV operator for transmission over his system.

As for the probability of S - 1618 being enacted as written, we suggest that you do not hold your breath waiting. The bill, introduced by Senator Albert Gore Jr. (D - Tenn), has not received much support, and even if it does pass both houses and becomes law, it will probably contain a "grandfather clause" to exclude already encrypted satellite operations. With it stuck in the quagmire of congressional red tape, most encoding will be in place and "grandfathered" before the bill can become law. (Westlink Report)

Dear Yuri:

In RADIOSPORTING I read about your planning for a new contest. It sounds interesting. However you have chosen a weekend which is already very busy with contesting. The Scandinavian Activity contest is held the two last weekends in September. First one on CW, last one on phone. Please be aware of the fact that the SAC in one of the major contests around. We shall have an extremely unhappy situation if you decide to overlook this fact and put this new contest on same weekends. PLEASE DO NOT DO SO!

In your new contest I hope that you come with a more justice (fair) scoring system than we have in the CQ contests. I have been contesting for quite a few years now. It is extremely frustrating to see ourself, over and over again, being beaten by mediocre stations in southern Europe (also other southern, closer to equator stations) quite new to the game.

There are many other things to be said, but I will try to deal with that later in a letter/article which I will send you.

Thanks for a very good magazine.

73, de Stig, LA7JO

Dear Stig,

Thank you for pointing this out. We are putting our WRC contest on the first weekend of October. Originally we were just going to replace the weekend of CAN-AM contest, without realizing the collision with SAC, which is quite popular in Europe. Now we will be colliding a bit with VK-ZL contest, but we hope this will be a lesser impact. We are trying to pick a weekend when the propagation is more uniform across the world. The best time is around the equinox time. We hope that you shall find our rules more fair and a better tool to judge the contester's performance around the world. I am looking forward to our contacts in the WRC contest!

73, VE3BMV

Friends of NCDXF:

** Beacon Station Managers
** Magazine and Newsletter writers
** DXpedition Operators

Season's Greetings. And may we extend our gratitude to you all for your help, consideration and activity on behalf of NCDXF during 1985.

Thanks to our 14.1 MHz Beacon Station Managers. We congratulate you for your dedication and excellence in maintaining your beacons as part of the informative, world-wide system. The beacons are monitored continuously by someone, somewhere in the world, and you managers make that reception possible.

We send our appreciation to you Magazine and Newsletter writers. You have been most considerate and generous in carrying news of NCDXF programs, activities and DXpeditions. We sincerely appreciate the nice things you have printed about our efforts. We hope to continue to produce more interesting and newsworthy projects for you to review for your readers.

And you intrepid DXpeditioners. You are among the world's most distinguished DXpedition operators. NCDXF is fortunate in being able to help support your travels to so many of the world's out-of-the-way places. Your operating skills are truly exemplary and can easily serve as role models for DX operating practice. You have all done an exciting and wonderful job of keeping interest in DXing high during the generally low-interest period of the sun spot cycle.

May we all continue to work together to serve the world-wide amateur community even better in the years ahead.

From all of us here, to all of you--thank you again for your help and our best wishes for 1986.

Yuri, thanks for carrying some of our stories.

73, John Troster, W6ISQ

Our pleasure NCDXF! Probably the best DX foundation - organization we have ever had. Your beacon system and other DX related activities you support and promote are a tremendous help to all of us active hams. Keep up super work and we are at your services any time you need it! 73, Yuri

Dear Yuri:

Please send me a set of application forms for the new DXCA Award.

I would also appreciate if you would clear up a couple of questions for me.
1. For confirmed QSO's prior to Jan. 1, 1986, will I have to send in a claimed list the same as for DXCA or will just a number be enough (eg. 203 countries confirmed since 1983)?
2. What happens if I start out monoband, let's say 20 meters. Will I have to stick to this band or can I also apply for monoband on other bands?
3. Is it permissible to work on separate mono-bands and then once 6 mono-bands have been achieved, join them together to qualify for Multi Band DXCA?
4. What are the requirements to qualify for the Honor Roll? (I probably should have waited ten years before asking this one. HI)

Thanks for taking your time and answering these questions for me.

What do you think about dropping the countries confirmed since 1945 from the "NEW" DXCA award. Those who are at the top or nearing the top can still continue with their DXCC as well as DXCA. Dropping everything before Jan. 01, 1986 for the DXCA would make it a clean slate for everyone. I think it might make everybody work a little harder too, after all 300 looks a lot better than 145, especially when your 145 doesn't have your all time total of 318 beside it for support. Somehow I seem to feel that if the first place qualifier has 180/219 and the third place qualifier has 155/307, it appears to me that the third place qualifier has a more impressive total. I would really like to see a fair start for everyone.

I was really glad to see the better quality paper with the January issue. I will be looking forward to the announcement and rules of the IRSA WRC contest.

I really enjoy RADIOSPORTING, you are really doing a great job. Please keep it up.

73, George Furtado, VE7EIK

P.S. Thanks for publishing my picture on the January issue. I hope a few more will submit a picture of themselves to RADIOSPORTING, it's sure nice to see who's behind that call sign and big amplifier.

Dear George,
Here are some quick answers:

1. As more people indicated, they'd rather see this dropped from our award, so we will not consider the all time score listings from before Jan. 1, 1986.

2. You can work simultaneously on all bands. Apply for your basic certificate as soon as you reach 100 countries on one band. The endorsements will be issued as you reach your individual milestones.

3. Yes, you can collect countries on the individual bands and than apply for the 6BDXCA.

4. The Honor Roll will list those who have the most countries in each category down to those who have the top score minus 10 percent. You could make the Honor Roll right from the beginning and stay on it if your score is within 10 percent of top scoring count.

We should have the necessary forms shortly and we will send them out.

Thanks for the picture. We wish that more people would "reveal" themselves and their stations. It most certainly is nice to see who is behind that call!

73 and good luck in chasing DXCA!

de VE3BMV

Dear Yuri:

Thanks for your letter of 11/11/85 and for announcing our Clipperton DX Club (DCXC) convention in 3 issues of RADIOSPORTING. Some US ops seemed to have read it and came from France or Germany or even California to assist. Please send me back issues with W2PV series. I don't want to miss any issue of your (and our) excellent magazine for contesters and DXers. Congratulations for all your work and long life to RADIOSPORTING, amateur radio and contesting!

I have been active during the 1985 CQ WW DX phone contest in the single-op/all-band category on almost serious basis, and that didn't happen to me for several years, being often operator of the multi-single station F3TV,. Here is F6BEE claimed score (PHONE AB):

Band	QSO's	Points	Zones	Countries
1.8	34	38	6	22
3.7	245	585	13	54
7	168	355	18	66
14	847	2252	32	89
21	795	2232	29	87
28	125	250	20	67
All	2214	5412 * (118+	385)=2,873,136	

Conditions were really good and there were even several east-coast stations (W2, 3, 4, VE1...) very loud here on 28 MHz. I have no idea of the other European claimed scores in my category and have no comparative reference, except that the previous French record is beaten and that my score is about 1 million points higher than last year Eu top scores, but conditions were much better. You are right - contesting is a blind competition.

Logs have been made after the contest, using a program I wrote especially for my computer, an Amstrad CPC664 (from U.K.) and special for WW DX contest points and multiplier.

The CW contest was run as Multi-Single (F6ARC, F6BEE, F9IE & F5IN), using this last call sign. Here is the claimed score:

Band	QSO's	Points	Zones	Countries
1.8	187	273	11	47
3.7	760	1468	19	67
7	696	1517	30	86
14	1000	2299	32	80
21	515	1346	27	78
28	10	15	5	10
All	3168	6918 * (124 + 368)		=3,403,656

Ten was dead, except with Africa.

To answer your request for my contribution, I think I could write 2 or 3 articles for RADIOSPORTING, but not on regular basis for 2 reasons: a lot of work this year and in 86 and also, I don't think I will have that much to tell about DX and contests in French speaking countries. I will try to write some general facts about F and overseas licensing, regulations, callsigns, clubs, French contests and later my thoughts about contesting from France, F contesters and DXers. I know almost all F DXers and contesters, but have no particular friends in French overseas departments, except FM5CD, FM5CL, FY7AN and FR5DX (ex FROFLO) that I know personally but no one in FG, FS, FH and FP.

I will be 32 in next February, have been F6BEE since Nov 1970, married with 2 daughters (5 and 2), and a RF design engineer, graduated in 78. F3TV is the callsign of the radio-club of the school where I got my EE degree.

Contests achievements: 5 plaques for 1st place in Europe in the ARRL DX Contest, multi-single category, with F3TV club station (CW in 81, 84-phone in 82, 84, 85). We have also got 5th place in CQ WW DX CW in 82; all contests as multi-single with only 2 or 3 operators. As F6BEE, I got some certificates for 1st place in F in various contests (WAE, IARU RS, ARRL 10m..) Also have 5BDXCC #627 (in 78), 313 countries credited by ARRL (mixed mode-next one means Honor Roll), 197 cfm/199 wkd for 5BWAZ (#296). Member of REF and BOD of the Clipperton DX club. I do not have a good photo to include, but you can see the F3TV guys on page 30 of October 85 issue of CQ; only signing Jack (not Jackie). According to these CW results, we are in the top 7, only one place short to see the call published! Both F6ARC and F9IE were with the 1978 DXpedition to Clipperton - a very good one, for sure.

Happy New Year, good health, luck, success in 1986, for yourself, your family and RADIOSPORTING.

73, Saget, F6BEE

Dear Yuri,

Thank you for your letter and for accepting me as a contributor to your magazine.

First I will write you about Mt. Athos to give you an idea of how things are. If an operation wants to be legal it must have permission from the monks. Now how do you get these documents?

Well, in Mt. Athos there are 20 monasteries. The head monks get together once a month and discuss various items. For example they may talk about an application from hams to go there and operate. If 19 monks say yes and just one says no, then permission is not given. They must all agree.

Since 1982 I was up for consideration three times but nothing happened. There were also some other attempts made with no results. Last summer they said that "Mt. Athos is a place for retreat and pray only, not for hobbies." As far as I know that was final. But who knows? Only God does.

I will send you pictures of some of our well known SV hams, an interview from SV1AB (word VHF recordman), and the first EME man in SV land. Also included will be news from the active SV5 hams.

I hope to hear from you again dear Yuri!

73, George, SV1RP

Dear George,
Thank you for your information. The Mt. Athos sure sounds challenging. Maybe we can figure out how to satisfy the requirements while getting permission to operate. We all are looking forward to your articles and stories on VHF record.

73, de VE3BMV

Dear Yuri,

Among other things I would like to congratulate you for your very nice publication. I consider it one of the very best of those which are available today, and I subscribe to most of the others. I like your "Down to Earth" approach to every facet of your magazine. It is a pleasure to read and enjoy. Your publication gets right to the meat of the subject and is written in terms which are simple concise and right to the point. It isn't necessary to waste a lot of time to reviewing other articles etc. I have enjoyed the first year's worth of issues and expect to continue to enjoy the ones to come.

I spent 27 months in Yugoslavia and operated for a lot of that time using the call YU1GM in 1953 and 1955. I married my wife Lidija in Yugoslavia and have a number of Yugoslav friends both there and here in the United States. I had one helluva time working stations from there from my home in Belgrade, and it is with many thanks to some very nice Yugoslav hams.

My station operates most of the bands from 6 meters to 80 and would cover 160 too if I could manage to get up an antenna for that band. I may yet be able to sqeeze one in on my lot. Like all other guys in this hobby, I would like to live on 5 acres someplace where I could put up 4 or 5 100 ft. plus towers and hang big beams on all of them. If I manage to live long enough maybe I'll get around to that.

I've held the calls, W8RYJ, W4GMP, YU1GM and K6SSJ. 1st licensed in 1936 in Michigan. Presently I am Chairman of the ARLL DX Advisory Committee so I have a great deal of interest in your coverage of the DX hobby. I'm pleased to say that you do a very good job at it and I wish to congratulate you once again for a fine publication.

R.W. "Bob" Thompson, K6SSJ

Dear Bob,

Thank you for your kind words, just trying to the best under the circumstances. I wish I had more time available to devote to the magazine. It can only get better. We are slowly progressing towards that. We hope that advertisers will "discover" us and help to carry the financial burden and to improve our quality more rapidly.

It is nice to see those words from someone connected with ARRL, while QST's DX column editor doesn't even see fit to mention us among the DX publications.

We would like to see all active hams to consider *RADIOSPORTING* to be THEIR magazine. It's here for all to use, exchange ideas and information. We will get it out fast for all to enjoy. Thanks again Bob, very much appreciated!

de Yuri

Dear Yuri,

Like majority of readers (if not all?) I hate list operation and with that you can throw in most so called DX NETS as well. Have in Europe the ZL2AAG net on 7085 kHz most mornings. It's a pain in you know what! The amount of DX that calls in on that net is obscene! Leaving the rest of the band void of DX most of the time (there are, fortunately, some exceptions). The net itself is bad enough, then you get some I3 or EA telling you the frequency is "in use" when you can be 6 kHz off the net frequency. I have called CQ on 7091 only to be told I'm QRMing the NET on 7085 and I should QSY higher! The TS930+SB220 can't be that wide, surely, Hi! I am not the only European to be told to QSY from the 7085 +- 5 or 6 kHz!

CQ WW Phone score here is 6854 QSOs, 105 Zones, 365 DXC with 3,221,380 points for single operator, all band category. The lot here is small and no room for good 160 m antenna.

73, Steve, GW4BLE

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The Classified Ads rate is 15 cents per word. Remittance in full (check or money order) must accompany copy. Each word, abbreviation, model number, and group of numbers count as one word. No charge for Postal or ZIP code. Ads should be typed or clearly printed on a separate piece of paper. The closing date is the 25th of the month preceding publication. A last name or call must appear in each ad with an address or phone number.

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VISALIA DX CONVENTION

The Southern California DX Convention will convene April 18 through the 20th, at the Holiday Inn in Visalia. Room reservations may be made by dialing (209) 651-5000 and asking for the convention reservation desk. Please do not dial the 800 line. Room rates are $42.00 single and $50.00 double.

Pre-registration for the convention is $38.00 and must be postmarked no later than March 31, 1986. All subsequent registrations will be $40.00. Please make checks payable to SCDX Convention and mail to :

Don Bostorn, N6IC
4447 Atoll Ave.
Sherman Oaks, CA 91423

The price of registration includes the Saturday banquet and Sunday brunch along with a cocktail party hosted by the Southern California DX Club on Friday night, and the famous Saturday night cocktail party hosted by Henry Radio of Los Angeles.

This year's program will feature many fascinating and interesting speakers including the DX Forum with Jim Rafferty, N6RJ, the contest forum with Dick Norton, N6AA, Lloyd and Iris Colvin, and many others.

Amateur Radio representatives from the People's Republic of China will be in attendance at the Saturday night banquet. In addition to this year's extraordinary program, many fabulous prizes will be given away including: a Kenwood TS940S as a pre-registration prize, a Henry 2K amplifier as the grand prize, and othders such as a Yaseu 757, 209 Hand-held, Butternut 40-80 vertical with 160 adapter, and many more.

A special ladies' luncheon wil be held on Saturday, so don't forget the XYL. The cost will be $8.00.

We look forward to your attendance in Visalia where we will really 'ham it up'. 73 and DX,
Frank J. Cuevas, Grand Chairman

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INTERNATIONAL RADIOSPORT ASSN.

P.C. Box 65, Don Mills, Ontario, Canada M3C 2R6 Tel. (416) 438-6313

Purpose and objectives:

1. To promote international friendship and goodwill through sportsmanship, radio contesting and DXing.

2. To improve the quality of amateur radio operators and operating through education and experience, by voicing the opinions of radio amateurs that are experienced and have contributed to the hobby.

3. To promote amateur radio contesting and other operating-related activities as a sport, and to provide the publicity and recognition that it deserves in the public media.

4. To publish timely articles in the monthly magazine "RADIOSPORTING" on various subjects of interest to Contesters, DXers, SWL, VHF, UHF and microwave enthusiasts, on RTTY, SSTV, computers in communications, fox hunting and anything of interest to the active ham striving for self-improvement. To feature technical articles on equipment design and modifications, antenna construction, radio-wave propagation, and commercial equipment reviews by qualified people.

5. To organize, as an annual event, the "International Contest Symposium," which runs parallel (evenings) with the Dayton Hamvention; to feature timely topics with the participation of some of the world's leading amateurs at the Syposium.

6. To hold an annual Awards Dinner with an entertainment program, where awards for various achievements will be presented.

7. To maintain and publish all time record tables for significant contests.

8. To sponsor and run an annual World Contest Championship, based on results of a number of major contests, with the annual "Contester of the Year" awards in various categories.

9. To administer the "Contest Hall of Fame" and vote on awarding membership to those who have significantly contributed to the sport of contesting.

10. To coordinate and assist in the scheduling of international contests.

11. To hold regular weekly meetings on air on 20 and 80 m. (14.200, 3.830)

12. To provide an automatic, computer controlled bulletin station that transmits the latest DX and Contest news on CW and RTTY.(14.098)

13. All in all, the IRSA is dedicated to the pursuit of excellence and quality in amateur radio by promoting, publicizing and leading the way.

14. Attractive numbered membership certificates and badges are issued to members.

15. IRSA is run by contesters who are selected for their accomplishments and it is independent of any national or commercial organizations.

16. IRSA will assist and sponsor Contests/DXpeditions, Trophies and other radio sporting and publicity events.

17. IRSA is a non profit organization, with all proceeds to be used to finance events and awards sponsored by IRSA and to cover expenses incured by Association.

18. IRSA members can display the IRSA logo on their QSL cards and correspondence; members agree to obey the Contester's Code of Ethics and to promote it.

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Honorary Life Membership will be awarded to those who significantly contribute to IRSA and the sport of contesting.

Members are entitled to be elected and to elect officers of IRSA. They will also enjoy many services and privileges offered exclusively to members.

RADIOSPORTING

INTERNATIONAL MONTHLY MAGAZINE - BY AND FOR ACTIVE RADIOAMATEURS

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	Dave Heil, K8MN

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